

Rule Book 2015



Faculty of Natural and Agricultural Sciences



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UNIVERSITY OF THE
FREE STATE
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UFS·UV
NATURAL AND
AGRICULTURAL SCIENCES
NATUUR- EN
LANDBOUWETENSAPPE

FACULTY OF
NATURAL AND AGRICULTURAL
SCIENCES

RULE BOOK 2015

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1. USING THE RULE BOOK

The Rule Book contains information that will enable students to plan their undergraduate as well as postgraduate studies in the Faculty of Natural and Agricultural Sciences, University of the Free State (UFS). The information can be divided into three sections, namely general administrative information, academic learning programmes and module content.

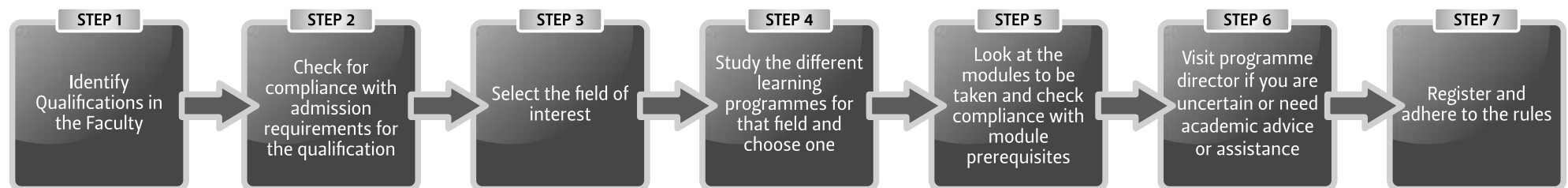
In the first section students find:

- Contact details of the academic administration officials in the Dean's office and at the student administration in the George du Toit Administration Building.
- Contact details of the different programme directors where students can get academic advice and assistance when choosing an appropriate learning programme. Consultations outside registration periods (January and July) are only available on appointment.
- Qualification types, the structure and the constitution of the qualifications.
- Core competencies for graduates.

The second section consists of:

- Faculty rules.
- Qualifications offered by the Faculty.
- Learning programmes for different qualifications.
- Transitional regulations.

Students need to follow these steps when determining the modules for which they have to register:



The third section contains module content information:

- Department in which modules are offered.
- Module code, NQF level, number of credits and CESM categories.
- Prerequisites, module name and contact sessions.
- Content of the module and the method of assessment.

The Rule Book describes students' rights and obligations. The academic programmes must be regarded as part of the agreement between the Faculty and the students. Students registering for a programme in the Faculty must adhere to the General Institutional Rules of the UFS as well as the Rules of the Faculty of Natural and Agricultural Sciences. Students will only be allowed to register if they comply with all the admission requirements.

It is important to note that even though the outcomes of academic programmes will remain unchanged from the first time of registration, minor changes to learning programmes, modules and module contents may occur so that the Faculty of Natural and Agricultural Sciences can ensure the relevance of the degrees. Students must therefore consult the new Rule Book every academic year before registration to ensure alignment with updated curricula, as the Faculty updates the Rule Book to keep abreast of the latest scientific developments. It is the student's **responsibility** to be fully conversant with these rules.

2. CONTACT DETAILS: OFFICE OF THE DEAN AND ACADEMIC ADMINISTRATION – BLOEMFONTEIN CAMPUS

| POSITION | DEAN | FACULTY MANAGER | LEARNING AND TEACHING MANAGER | NATURAL SCIENCES UNDERGRADUATE AND HONOURS | AGRICULTURE AND BUILDING SCIENCES | MASTER'S AND DOCTORAL DEGREES |
|--------------|------------------------------|---------------------------|-------------------------------|--|---|--|
| NAME | Prof. Neil Heideman | Ms L Damons | Ms Elzmarie Oosthuizen | Ms Meriam Joggom Ms Chantelle Joseph | Ms Epefia Maboas Ms Bertha Motloung | Ms Rebecca Dipyere Ms Mandy Basson |
| BUILDING | Room 9, Biology Building | Room 11, Biology Building | Room 10, Biology Building | Glass doors B1/B6, George du Toit Administration Building | Glass doors, A3/Room N143 George du Toit Administration Building | Room 315 / 322A, George du Toit Administration Building |
| TELEPHONE NR | 051 401 2322 | 051 401 3199 | 051 401 2934 | 051 401 9271 | 051401 2943 | 051 401 2943 / 2722 |
| E-MAIL | dean@ufs.ac.za | VACANT | oosthuizenem@ufs.ac.za | Jogommm@ufs.ac.za | maboasemb@ufs.ac.za | dipyererd@ufs.ac.za bassonmg@ufs.ac.za |
| WEB ADDRESS | http://www.ufs.ac.za/natagri | | | | | |

3.1 CONTACT DETAILS: PROGRAMME DIRECTORS – BLOEMFONTEIN CAMPUS

| Programme | Architecture | Agricultural Sciences | Agricultural Economics Agricultural Management | Biochemistry | Botany, Plant Breeding, Plant Health Ecology, Plant Pathology, Environmental Rehabilitation | Computer Science, Informatics, Information Technology | Consumer Science | Disaster Management | Environmental Management | Extended and UPP Agricultural Sciences | Genetics, Behavioural Genetics, Human Molecular Biology, Forensic Sciences |
|--------------|--|--------------------------------------|---|---|---|---|---|----------------------------------|------------------------------------|--|--|
| Name | Mr Jako Olivier | Prof. Japie van Wyk | Dr Antonie Geyer | Dr Frans O'Neill | Dr Botma Visser | Mr Jaco Marais | Prof. Hester Steyn | Ms Olivia Kunguma | Ms Marinda Avenant | Ms Elzmarie Oosthuizen | Ms Zurika Odendaal |
| Building | Room 26, ARG111, Architecture Building | Room LG 3, G02, Agriculture Building | Room LG 1, 129 Agriculture Building | Room 5, Biotechnology Building | Room134, Biology Building | Room WWG 313, Mathematical Sciences Building | Room LG 9, 106, Agriculture Building | Centre for Disaster Management | Room 103 Agriculture Building | Room 10, Biology Building | Room 322, Steyn Annex |
| Telephone Nr | 051 401 2332 | 051 401 2677 | 051 401 9053 | 051 401 7553 | 051 401 3278 | 051 401 2929 | 051 401 2304 | 051 401 2721 | 051 401 2863 | 051 401 2934 | 051 401 2776 |
| E-mail | olivierji@ufs.ac.za | vanwykjb@ufs.ac.za | geyerac@ufs.ac.za | oneillFH@ufs.ac.za | visserb@ufs.ac.za | maraisj@ufs.ac.za | steynhj@ufs.ac.za | KungumaO@ufs.ac.za | avenantmf@ufs.ac.za | oosthuizenem@ufs.ac.za | odendaalz@ufs.ac.za |
| Programme | Geography | Geology, Geohydrology | Mathematical Sciences | Mathematical Statistics, Actuarial Science | Microbiology, Microbial Biotechnology | Physics, Chemistry | Quantity Surveying and Construction Management | Sustainable Agriculture | Urban and Regional Planning | UPP and Extended Natural Sciences | Zoology & Entomology |
| Name | Ms Eldalize Kruger | Ms Justine Magson | Mnr C Venter | Mr Michael von Maltitz | Prof. Koos Albertyn | Dr Johan Venter | Dr B.G. Zulch | Dr Johan van Niekerk | Ms Antoinette Nel | Ms Rina Meintjes | Dr C Jansen van Rensburg |
| Building | Room GEO 2.3, Geography Building | Room GG 305, Geology Building | Room WWG 121, Mathematical Sciences Building | Room W102, Mathematical Statistics Building | Room 51, Biotechnology Building | Room CEM 2, 101, Chemistry Building | Room A6, Quantity Surveying and Construction Management | Room 1B 68, Agriculture Building | Room 8 ARG8, Architecture Building | Room CEM 2, 202, Chemistry Building | Room D118, Biology Building |
| Telephone Nr | 051 401 2185 | 051 401 9928 | 051 401 2320 | 051 401 2609 / 2933 | 051 401 2223 | 051 401 3336 | 051 401 3849 | Office: 051 401 3765 | 051 401 3210 | 051 401 2783 | 051 401 9357 |
| E-mail | krugere@ufs.ac.za | MarkramJ1@ufs.ac.za | venterc@ufs.ac.za | vmaltitz@ufs.ac.za | albertynj@ufs.ac.za | venterja@ufs.ac.za | zulchbg@ufs.ac.za | vNiekerkJA@ufs.ac.za | nelal@ufs.ac.za | meintjr@ufs.ac.za | JvRensC@ufs.ac.za |

3.2 CONTACT DETAILS: ACADEMIC ADMINISTRATION AND PROGRAMME DIRECTORS – QWAQWA CAMPUS

| Programme | ASSISTANT DEAN QWAQWA | FACULTY OFFICER: QWAQWA | UPP and Extended Natural Sciences | Biological Sciences | Mathematics and Applied Mathematics | Physics, Chemistry |
|------------------|---------------------------------|-------------------------|-----------------------------------|----------------------------|-------------------------------------|----------------------------|
| Name | VACANT | Ms Mpho Leripa | Ms Lea Koenig | Dr Erwin Sieben | Mr Teboho Lesesa | Mr Richard Ocaya |
| Building | Humanity Building Qwaqwa Campus | Science Building Room 5 | Education Building Room EDUC1013 | Science Building Room 2006 | Library Building Room LB2014 | Science Building Room 0007 |
| Telephone Number | 058 718 5134 | 058 718 5132 | 058 718 5207 | 058 718 5330 | 058 718 5235 | 058 718 5301 |
| E-mail | VACANT | leripamp@qwa.ufs.ac.za | koenigL@qwa.ufs.ac.za | siebenEJ@qwa.ufs.ac.za | lesesaT@qwa.ufs.ac.za | ocayaRO@qwa.ufs.ac.za |

4. ACADEMIC STAFF

| | AGRICULTURAL ECONOMICS (051 401 2824) | ANIMAL, WILDLIFE AND GRASSLAND SCIENCES (051 401 2211) | SOIL, CROP AND CLIMATE SCIENCES (051 401 2212) | CONSUMER SCIENCE |
|---------------------------------------|---|--|---|---|
| Professor | Prof. B.J. Willemse | *Prof. J.P.C. Greyling , Prof. G.N. Smit, Prof. H.A. Snyman, Prof. J.B. van Wyk, Prof. F.W.C. Nesor | Prof. L.D. van Rensburg *Prof. C.C. du Preez | |
| Professors Extraordinary | | Prof. M.M. Scholtz, Prof. T.L. Nedambale, Prof. A.J. van der Zijpp, Prof. A. Maiwashe | | |
| Associate Professor | Prof. B. Grové | Prof. H.O. de Waal | Prof. P.A.L. le Roux, Prof. C.W. van Huyssteen | *Prof. H.J.H. Steyn |
| Affiliated Professors | | | Prof. C.J. Stigter, Prof. S. Walker | |
| Affiliated Associate Professor | | | Prof. M. Tsubo, Prof. R. van Antwerpen | |
| Senior Lecturer | Dr A.C. Geyer | Dr A.M. Jooste | Dr J. Allemann, Dr G.M. Ceronio, Dr G.M. Engelbrecht | |
| Lecturers | Dr H. Jordaan, *Dr D.B. Strydom , Dr N. Matthews, Mr A.O. Ogundeji, Mr F.A. Maré, Mr J.I.F. Henning, Mr P. Mokhatla, Mr H.N. van Niekerk | Dr M.D. Fair, Mr P.J. Malan, Mr F.H. de Witt, Mr O.B. Einkamerer, Dr G.D.J. Scholtz, Mr F. Deacon | Mr J.H. Barnard, Ms L. de Wet, Ms E. Kotzé, Mr A.S. Steyn | Ms I. van der Merwe, Dr J.F. Vermaas |
| Junior Lecturers | | Mr M.B. Raito | | Ms J.S. van Zyl, Ms P.Z. Swart, Ms N. Cronje, Ms N. Tinta |
| Lecturers Units | Dr L. Terblanche, Mr W.A. Lombard, Ms N. Mdungela, Ms N. Venter, Ms J. Hayward | | Dr J.H. van der Waals | |
| Research Associate | | | Prof. J.C. Pretorius | |
| Junior Researcher | | Dr B.B. Janecke | | |
| Agricultural Engineering | Mr J.J. van Staden | | | |

| | ARCHITECTURE (051 401 2332) | QUANTITY SURVEYING AND CONSTRUCTION MANAGEMENT (051 401 2248) | URBAN AND REGIONAL PLANNING (051 401 2486) |
|-----------------------------|---|--|--|
| Professor | Prof. W.H. Peters | | Prof. V.J. Nel |
| Associate Professor | | *Prof. K. Kajimo-Shakantu | |
| Affiliated Professor | Prof. O. Joubert | | |
| Senior Lecturers | Ms M. Bitzer, Ms P.N. Tumubweinee, Ms A. Wagener | Dr B.G. Zulch | Dr M.M. Campbell |
| Lecturers | Mr G. Bosman, Mr J.L. du Preez, Mr J.W. Ras | Mr P.M. Oosthuizen, Dr M.S. Ramabodu, Ms M. Els, Dr T Froise, Ms T Bremer, Mr L. Mohlomola, Ms E. Jacobs, Ms O.R.C. du Preez (contract lecturer) | Ms T Mphambukeli, Mr T Stewart |
| Junior Lecturers | *Mr H.B. Pretorius , Mr W.R. Bitzer, Mr J.I. Olivier, Mr J.H. Nel, Mr H. Raubenheimer, Mr Z.G. Wessels | | Mr S Donoon-Stevens, Mr KS Mocwagae |
| Research Fellow | | Prof J.J.P Verster | |

| | CHEMISTRY (051 401 9212) | COMPUTER SCIENCE AND INFORMATICS (051 401 2754) | GENETICS (051 401 2595) | GEOGRAPHY (051 401 2255) | GEOLOGY (051 401 2515) | MATHEMATICS AND APPLIED MATHEMATICS (051 401 2691) | MATHEMATICAL STATISTICS AND ACTUARIAL SCIENCE (051 401 2311) |
|--|---|---|--|---|---|--|--|
| Distinguished Professor | *Prof. A. Roodt | | | | | | |
| Senior Professor | | | | | | *Prof. J.H. Meyer | Prof. M.S. Finkelstein |
| Professor | | | *Prof. J.J. Spies, Prof. J.P. Grobler | Prof. G.E. Visser | | Prof. A.H.J.J. Cloot | Prof. R. Schall |
| Professor Researcher | | | | | Prof. W.A. van der Westhuizen | | |
| Professors Extraordinary | | | | | | | |
| Professors | Prof. J.C. Swarts, Prof. B.C.B. Bezuidenhout, Prof. J. Conradie | *Prof. P.J. Blignaut | | | | | |
| Associate Professors | Prof. W. Purcell, Prof. H.G. Visser | Dr E. Nel | | | Prof. W.P. Colliston, Prof. M. Tredoux, Prof. C.D.K. Gauert | Prof. T.M. Acho | |
| Affiliated Professors | Prof. D. Ferreira, Prof. H. Frank, Prof. K. Swart, Prof. T. van der Merwe, Prof. S. Otto, Prof. J.M. Botha | | Prof. T.E. Turner | | Prof. D.E. Miller, Prof. R. Scheepers | | |
| Affiliated Associate Professors | Prof. C. Edlin, Prof. G. Fouché, Prof. V. Maharaj, Prof. G.Steyl | | Prof. A. Kotzé | | | | |
| Senior Lecturers | Dr S.L. Bonnet, Dr K von Eschwege, Dr J.A. Venter, Dr E.H.G. Langner, Dr E. Erasmus | Dr A. van Biljon, Dr L. de Wet, Dr J.E. Kotze, Dr T. Beelders | | *Dr C.H. Barker Dr J.J le Roux | Dr J.O. Claassen, *Dr F. Roelofsse | Ms J.S. van Niekerk, Dr S. Dorfling | Dr J.M. van Zyl, Dr L. van der Merwe, *Mr F.F. Koning, Dr D. Chikobvu, Dr A. Verster |
| Senior Lecturer- researcher | | | | | Dr H.E. Praekelt | | |
| Lecturers | Dr L. Twigge, Dr A. Brink, Dr M. Schutte-Smith, Dr E. Müller, Dr R. Shago, Dr A. Wilhelm, Ms A-L. Manicum | Ms E.H. Dednam, Mr A.J. Burger, Mr W. Nel, Mr R. Brown | Dr K. Ehlers, Mr M.F. Maleka, Mr J.A. Viljoen, Dr P. Spies, Ms S-R Schneider, Ms Z. Odendaal, Ms H. Bindeman | Ms E. Kruger, Ms T.C. Mehlomakhulu, Dr R.T. Massey, Ms M. Rabumbulu, Ms A. Pretorius, Mr A.J. van der Walt | | Ms A.F. Kleynhans, Mr C. Venter | Mr A.M. Naudé, Mr M.J. von Maltitz, Mr S. van der Merwe, Ms E. Girmay, Ms W. Oosthuizen, Ms Z. Ludick, Dr M. Sjölander, Mr J. Blomerus, Mr J. Venter |
| Affiliated Lecturers | | | Dr D.L. Dalton, Lt.-Col. A. Lucassen | | | | |
| Junior Lecturers | | Ms M.J.F. Botha, Mr R.C. Fouché, Mr J. Marais, Mr J.P. du Plessis, Mr D. Wium, Ms T Nkali | Ms L. Wessels | | Mr A.I. Odendaal, Ms J. Magson, Ms T. Mapoli, Mr R. Rentel, Ms R. Makhadi | Mnr M. Fasondini Mnr B.E de Klerk Ms A. Swart | |
| Subject Coordinators | Dr C. Marais, Ms R. Meintjes | | | | | | |

| | CHEMISTRY (058 718 5130) | COMPUTER SCIENCE AND INFORMATICS (058-718 5216) | GEOGRAPHY (058-718 5476) | MATHEMATICS AND APPLIED MATHEMATICS (058-718 5204) |
|----------------------------|---|--|---|--|
| QWAQWA-CAMPUS | | | | |
| Professor | Prof. A.S. Luyt | | | |
| Associate Professor | | | Prof. W.F. van Zyl | |
| Senior Lecturers | | | *Dr G. Mukwada Dr S.A. Adelabu | |
| Lecturers | Ms N.F. Molefe, Mr T.A. Tsotetsi, Ms M.A. Malimabe, Mr K. Mpitso | *Mr R.M. Alfonsi, Dr R.D. Wario, Mr A.G. Musa | Mr A. Adjei, Ms M. Naidoo, Dr S Adelaba | Mr S.P. Mbambo |
| Junior Lecturers | *Mr R.G. Moji, | Mr B. Sebastian, Mr F.M. Radebe, Mr T. Lesesa, Mr M.B. Mase, Mr G.J. Dollman | Mr P.S. Mahasa, Ms N.M. Sekhele, Mr N Sekhele | Ms H.C. Faber |

| | MICROBIAL, BIOCHEMICAL AND FOOD BIOTECHNOLOGY (051 401 2396) | | PHYSICS (051 401 2321) | PLANT SCIENCES (051 401 2514) | | | ZOOLOGY AND ENTOMOLOGY (051 401 2427) |
|--|---|-----------------------------------|--|--|---|---|---|
| | Division of Microbiology and Biochemistry | Division of Food Science | | Division of Plant Pathology | Division of Botany | Division of Plant Breeding | |
| Senior Professor | | | Prof. H.C. Swart | | | | |
| Distinguished Professor | | | | | | | |
| Professor | * Prof. M.S. Smit, Prof.J.C.du Preez, Prof.J.Albertyn, Prof. R.R. Bragg, Prof.S.G.Kilian, Prof. E. van Heerden, Prof. B.C. Viljoen | Prof.G.Osthoff | Prof. P.J. Meintjes, *Prof. J.J. Terblans, Prof. O.M. Ntwaeaborwa, Prof. W.D. Roos | Prof. Z.A. Pretorius, Prof. W.J. Swart, Prof. N.W. McLaren | | Prof. M.T. Labuschagne | *Prof. L. Basson, Prof. S. v.d. M. Louw |
| Professors Extraordinary | | | | Prof. P. Crous | | | Prof. G.L. Prinsloo, Prof. L.J. Fourie |
| Associate Professors | Prof. C.H. Pohl-Albertyn | Prof. A. Hugo, Prof. C.J. Hugo | Prof. M.J.H. Hoffman Prof. R.E. Kroon | | Prof. P.J. du Preez | *Prof. L. Herselman | Prof. L.L. van As |
| Affiliated Professors | Prof. M.F. DeFlaun | | | | | | |
| Affiliated Associate Professors | Prof. . E.J. Lodolo | | Prof. K.T. Hillie | Prof. R. Prins | Prof. M. van der Bank | Prof. R. Prins, Prof. J.B.J. van Rensburg | |
| Senior Lecturers | Dr H.G. O'Neill, Dr F.H. O'Neill, Dr D. Opperman | Dr J. Myburgh, Dr M. de Wit | | Dr M. Gryzenhout, Dr G.J. Marais | Dr G.P. Potgieter, Dr B. Visser | | Dr C.R. Haddad |
| Lecturers | Dr O.M. Sebolai, Dr C.W. Swart-Pistor | Dr C. Bothma | Dr B. van Soelen | | Dr M. Cawood, Dr L. Mohase, Dr M. Jackson, Dr L. Joubert Ms M. Westcott | Dr A. van Biljon, Dr A. Minnaar-Ontong, Dr R. van der Merwe | Ms E.M.S.P. van Dalen, Mr H.J.B. Butler, Dr C. Jansen van Rensburg, Dr S Brink Mr V.R. Swart, Ms L. Heyns, Mr D Fourie |
| Junior Lecturers | Dr C.E. Boucher, Mr W.P.D. Schabert | | | | | | |
| Research Associate | | | | | Dr L. Rossouw | | |
| Senior Researcher | | | Dr E Coetsee-Hugo | | | | |

| | | | | | | | |
|------------|--|--------------------------|----------------------------------|---|--------|----------------|--|
| Researcher | Ms L. Steyn | | | | | | |
| | MICROBIAL, BIOCHEMICAL AND FOOD BIOTECHNOLOGY | | PHYSICS (058 718 5302) | PLANT SCIENCES (058 718 5134) | | | ZOOLOGY AND ENTOMOLOGY (058 7185324) |
| | Division of Microbiology and Biochemistry | Division of Food Science | | Plant Pathology | Botany | Plant Breeding | |

QWAQWA-CAMPUS

| | | | | | | |
|---------------------|--|---|--|--|--|--|
| Associate Professor | | Prof. B.F. Dejene | | | | |
| Senior Lecturers | | | | *Dr A.O.T. Ashafa, Dr E.J.J. Sieben, Dr L.V. Buwa | | *Dr A. le Roux, |
| Lecturers | | *Mr K.G. Tshabalala Mr R.O. Ocaya, Mr S.V. Motlounq, | | Dr R. Ngara | | Dr P.M. Leeto, Dr J. van As, Dr E. Bredenhend Ms H.J.M. Matete, Ms M. van As |
| Junior Lecturers | | Dr L.F. Koao | | Mr T.R. Pitso | | |

| | | | | | |
|---------------------------------|--|---|---|---|--|
| | DIMTEC (051 401 2721) | CENTRE FOR MICROSCOPY (051 401 2264) | CENTRE FOR ENVIRONMENTAL MANAGEMENT (051 401 2863) | CENTRE FOR SUSTAINABLE AGRICULTURE, RURAL DEVELOPMENT AND EXTENSION (051 401 2163) | INSTITUTE FOR GROUNDWATER STUDIES (051 401 2175) |
| Director | | | Ms M.F. Avenant (acting) | *Acting Head Dr J.A. van Niekerk | *Prof. PD Vermeulen |
| Professor | | | | | |
| Associate Professor | | Prof. P.W.J. van Wyk | | | |
| Affiliated Professors | | | Prof. A. Turton | | |
| Affiliated Associate Professors | | | | | Prof. K.T. Witthüser |
| Affiliated Researchers | | | | | Prof. J.F. Botha, Dr J. van der Merwe |
| Senior Lecturer | | | | Prof. I.B. Groenewald | |
| Lecturers | *Dr A.J. Jordaan | | | | |
| Junior Lecturers | Dr B. Grové, Dr L. Terblanche, Prof. G. Viljoen, Mr E. du Plessis, Prof. H. Hudson, Prof. W. Purcell, Mr C. Dreyer, Dr D. Sakulski, Dr H. Booysen, Ms A. Weyers, Dr D. Chikobvu | | | | |
| | Ms O. Kunguma, Ms A. Ncube, Ms J. Belle, Mr A.O. Ogundeji | | | | |
| Lecturers/Researchers | | | | | Dr F.D. Fourie, Dr M. Gomo, Mr S.S. de Lange, Mr E. Lukas Dr A. Atangana |
| Postdoctorate Researchers | | | | | Mr P.J.H. Lourens |
| Research Associate | | | Dr N.L. Avenant, Dr H. Bezuidenhout, Dr J. Brink, Dr D. Codron, Dr N.B. Collins, Mr P. Grundlingh, Dr J.R. Henschel, Dr F. Kruger Dr S. Mitchell, Prof. M.T. Seaman, Dr D.F. Toerien, Dr A. Weaver Dr P.C. Zietsman | Prof. I.B. Groenewald, Prof. A. Stroebel Prof. A.E. Nesamvuni, Prof. A. Pell Dr K. Davis, Dr C. Dlamini Dr S.E. Terblanche, Dr B.D. Nkosi Dr E.M. Zwane | |
| Chief Scientist | | | | | Mrs L-M Deyssel |

5. QUALIFICATION TYPES

The Higher Education Qualifications Framework (HEQF) contains nine qualification types mapped on to the six levels of the National Qualifications Framework (NQF) offered by higher education institutions. Some levels have more than one

qualification type. The following qualification types are presented at the Faculty of Natural and Agricultural Sciences, UFS:

| UNDERGRADUATE QUALIFICATIONS | | | | POSTGRADUATE QUALIFICATIONS | | | |
|------------------------------|------------|-----------------------|--|-----------------------------|------------|-----------------------|--|
| Type of qualification | Exit level | Minimum total credits | Credits and level | Type of qualification | Exit Level | Minimum total credits | Credits and level |
| Advanced Diploma | 7 | 120 | Minimum 120 credits at Level 7 | Postgraduate Diploma | 8 | 120 | Minimum 120 credits at Level 8 |
| Bachelor Degree | 7 | 360 | Minimum 120 credits at Level 7 Maximum 96 credits at Level 5 | Bachelor Honours Degree | 8 | 120 | Minimum 120 credits Minimum 120 credits at Level 8 |
| Professional Degree | 8 | 480 | Minimum 120 credits at Level 7 Minimum 96 credits at Level 8 Maximum 96 credits at Level 5 | Master's Degree | 9 | 180 | Minimum 180 credits Minimum 120 credits at Level 9 |
| | | | | Doctoral Degree | 10 | 360 | Minimum 360 credits Minimum 360 credits at Level 10 |

6. CONSTITUTION OF QUALIFICATIONS

The majority of the bachelor's degrees offered in the Faculty of Natural and Agricultural Sciences consist of three years' study. The first year of study provides students with the opportunity to develop a broad scientific foundation and they are required to complete eight modules (four modules per semester). These modules serve as the foundation for specialisation in the subsequent years. In the second year of study, majors are selected (at NQF Level 6), supplemented with modules from a supportive discipline. Learning programmes provide students with the opportunity to select modules from related supportive disciplines to ensure purposeful qualifications. For most degrees, in the third year of study,

students must specialise in two major fields of interest, for example, Physics and Chemistry, or Microbiology and Biochemistry, or Genetics and Botany (at NQF Level 7), with at least a total of 60 credits completed for each major. Other degrees require specialisation in more fields of interest and the total number of 120 credits on NQF level 7 credits are required. Furthermore, students may also be required to complete modules to ensure that they have the necessary literacy required to function in a demanding academic environment. The diagram below indicates how degrees are composed and how one qualification provides entry into a qualification at the next NQF level.

The bachelor's degree (B) makes provision for three fields of interest, namely:

- Architecture
- Agricultural Sciences
- Consumer Sciences

The Bachelor of Science (BSc) and the Bachelor of Science Honours degrees make provision for six fields of interest, namely:

- Biological Sciences
- Building Sciences
- Consumer Sciences
- Chemical and Physical Science
- Geosciences
- Information Technology
- Mathematical Sciences

The Bachelor of Sciences in Agriculture (BScAgric) degree makes provision for three fields of interest, namely:

- Animal, Grassland and Wildlife Sciences
- Plant Breeding and Plant Pathology
- Soil, Crop and Climate Sciences

In each field of interest different modules may be combined as majors. The different combinations of majors, minors and supportive modules are referred to as learning programmes. All the learning programmes comply with the minimum credits as indicated under the heading *Types of Qualifications* above. Each learning programme has a unique code which refers to a qualification registered with SAQA. The first two or three digits refer to different degrees as follows:

| | | | | | | | |
|-------------------------------|-------|--|-------|---|-------|-----------------------------------|-------|
| Advanced Diploma | 400xx | Bachelor Agric | 501xx | Master's degree by dissertation | 473xx | Doctor | 493xx |
| Advanced Diploma Agric | 500xx | Bachelor of Science Agriculture | 5xyy | Master's degree by coursework | 474xx | Doctor of Philosophy | 491xx |
| Bachelor | 401xx | where xx and yy represent the | | Master of Science by dissertation | 471xx | Doctor of Science | 490xx |
| Bachelor of Science | 4xyy | codes of two majors | | Master of Science by coursework | 472xx | University Preparation Programmes | |
| where xx and yy represent the | | Bachelor Honours | 453xx | Master of Agricultural Sciences by dissertation | 571xx | Agriculture | 5000x |
| codes of two majors | | Bachelor of Science Honours | 450xx | Master of Agricultural Sciences by coursework | 572xx | Sciences | 4000x |
| | | Bachelor of Science in Agriculture Honours | 550xx | | | Extended programmes | |
| | | Postgraduate Diploma | 460xx | | | Agriculture | 509xx |
| | | | | | | Sciences | 409xx |

The first digits that indicate the degree, can include one of the two digits representing a major. The subsequent digits represent either the selected two majors or the major and minor in the case of the Bachelor of Science Agriculture degree, or a single specialty area in the case of Honours, Master's and Doctoral degrees. Every discipline is identified by a two-digit code as given in the table below.

Table 1: Identification codes of different disciplines

| | | | | | | | |
|--------------------------|----|----------------------------------|----|-------------------------|----|-----------------------------|----|
| Actuarial Science | 10 | Botany | 20 | Forensic Sciences | 30 | Physics | 40 |
| Agricultural Economics | 11 | Chemistry | 21 | Genetics | 31 | Plant Breeding | 41 |
| Agrometeorology | 12 | Computer Science and Informatics | 22 | Geochemistry | 32 | Plant Pathology | 42 |
| Agronomy | 13 | Consumer Science | 23 | Geography | 33 | Quantity Surveying | 43 |
| Architecture | 14 | Construction Management | 24 | Geohydrology | 34 | Soil Science | 44 |
| Animal Science | 15 | Disaster Management | 25 | Geology | 35 | Spatial planning | 45 |
| Applied Mathematics | 16 | Engineering Science | 26 | Grassland Science | 36 | Statistics | 46 |
| Astrophysics / Astronomy | 17 | Entomology | 27 | Mathematical Statistics | 37 | Sustainable Agriculture | 47 |
| Behavioural Genetics | 18 | Environmental Geology | 28 | Mathematics | 38 | Urban and Regional Planning | 48 |
| Biochemistry | 19 | Food Science | 29 | Microbiology | 39 | Zoology | 49 |

Table 2: Identification codes of other specialisation fields

| | | | | | | | |
|----------------------------------|---------|--|----|--|----|----------------------------------|----|
| Approved Alternative Combination | 00 | Facilities Management | 58 | Mineral Resource Throughput Management | 68 | Forensic Genetics | 78 |
| Programme without two majors | 01 – 09 | Finance | 59 | Nano Sciences | 69 | Forensic Entomology | 79 |
| Accounting | 50 | Geographical Information Systems | 60 | Plant Health Ecology | 70 | Computer Information Systems | 80 |
| Agricultural Engineering | 51 | Human Molecular Biology | 61 | Polymer Sciences | 71 | Forensic Interdisciplinary | 81 |
| Agricultural Management | 52 | Irrigation Management | 62 | Property Sciences | 72 | Irrigation Science | 82 |
| Business | 53 | Human Settlements | 63 | Psychology | 73 | Plant Breeding Interdisciplinary | 83 |
| Environmental Sciences | 54 | Land & Property Development Management | 64 | Risk Analysis | 74 | Wildlife Science | 84 |
| Economics | 55 | Life Sciences | 65 | Wildlife Management | 75 | | |
| Environmental Management | 56 | Limnology | 66 | Physiology | 76 | | |
| Environmental Rehabilitation | 57 | Microbiotechnology | 67 | Forensic Chemistry | 77 | | |

The curricula for the different learning programmes consist of three types of modules, namely compulsory, elective and required modules. Compulsory modules must be taken by all the students in the learning programme; elective modules provide students with the opportunity to select modules of interest; and required modules must be followed when a student does not comply with certain requirements. The curricula for the different learning programmes are set out below, starting on p.34.

Examples of learning programme codes

| Learning programme | First two or three digits represent type of degree (or part of the major) | Subsequent digits represent different disciplines or specialisation fields | Learning programme code |
|----------------------------------|---|--|-------------------------|
| BAgric In Agricultural Economics | 401xx | xxx11 | 40111 |
| BConsumer Science | 401xx | xxx23 | 40123 |
| BSc with Chemistry and Physics | 42xxx (where 2 is part of 20, the code for Chemistry) | x2140 | 42140 |
| BSc Hons Chemistry | 450xx | xxx21 | 45021 |
| MSc Chemistry by dissertation | 471xx | xxx21 | 47121 |
| PhD Chemistry | 491xx | xxx21 | 49121 |

7. STRUCTURE OF QUALIFICATIONS

COMPOSITION OF THREE AND FOUR YEAR DEGREES

The different blocks represent different modules; if the blocks have the same colour they represent the same discipline.

| Three year Bachelor's Degree Exit Level 7 | | | | | | | | | | Four year Bachelor's Professional Degree Exit Level 8 | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| YEAR | | | | | | | | | | YEAR | | | | | | | | | |
| 1 | | | | | | | | | | 1 | | | | | | | | | |
| 2 | | | | | | | | | | 2 | | | | | | | | | |
| 3 | | | | | | | | | | 3 | | | | | | | | | |
| 4 | One year Bachelor Honours Degree Exit Level 8 | | | | | | | | | 4 | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| Two year Master's Degree Exit Level 9 | | | | | | | | | | | | | | | | | | | |
| Research project culminating in a dissertation | | | | | | | | | | Course work and a research project culminating in a dissertation | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| Three year Doctoral Degree Exit Level 10 Research project cumulating in a thesis | | | | | | | | | | | | | | | | | | | |

MODULE CODES

Undergraduate modules may be presented as semester or year modules. The credits awarded to every module give an indication of the teaching and learning time. One module credit equals 10 notional hours which include hours spent in the lecture room and on independent work and study.

A module is indicated with the code ABCDwxyz and this code represents the following:

- ABCD Indicates the discipline
- w A numeral stating the study year, for example first year = 1
- x Indicate NQF level
- y An odd number indicates the first semester and an even number indicates the second semester. The numerals 0 indicates a year module
- z The number multiplied by four indicate the number of credits

For example, CROP3754 indicates that it is an Agronomy module (CROP), on NQF Level 7, presented during the third academic year at NQF Level 7 (3), that the module is presented during the first semester (odd number 5), and represents 4x4 = 16 teaching credits (4).

The numerical code for honours, masters and doctorate modules will start with a 6, 7 for structured or 8 research and 9. If the last number is 0 it indicate that the modules have either more than 36 credits or the credits are not a multiple of four.

8. CORE COMPETENCIES FOR GRADUATES

A Bachelor's or Bachelor of Science Graduate is:

| Academically excellent | Adjusted to cultural diversity | An active global citizen |
|--|---|---|
| <i>This entails that the student:</i> | | |
| <ul style="list-style-type: none"> Attains a strong sense of academic integrity and scholarship. Becomes self-motivated and self-regulated, with an ability to continuously direct his/her own learning. Adapts to a changing environment and becomes committed to lifelong learning. Accepts critical thinking and decision-making as part of the learning process. Attains an appropriate level of achievement in language proficiency, reading and writing, problem solving, communication and broad research activities. Becomes competent in information and communication technologies. Develops cognitive and analytical skills that are flexible and transferable through various learning experiences. | <ul style="list-style-type: none"> Acquires an understanding of the social and cultural diversity in our country. Learns to value and respect different cultures. | <ul style="list-style-type: none"> Acquires an appreciation of the global perspective on his/her chosen discipline(s). Learns to accept social responsibilities. Is able to work effectively both as a team leader and a team member. Takes cognisance of existing social, economic, political and environmental issues. Encourages the improvement and sustainability of the environment. Respects human rights, attaches importance to equity and values, ethics and ethical standards. |

| Knowledge | Skills | Values and attitudes |
|--|---|---|
| <i>A B of BSc Graduate has the following:</i> | | |
| <ul style="list-style-type: none"> Integrated, comprehensive knowledge of the main areas within the two major disciplines of choice. This includes an understanding of, and an ability to apply and evaluate, the key terms, concepts, facts, principles, rules and their theories. Detailed knowledge of at least one area of specialisation and how that knowledge relates to other fields, disciplines or practices. An understanding of contested knowledge and an ability to evaluate types of knowledge and explanations typical of the discipline. | <ul style="list-style-type: none"> An understanding of a range of enquiry methods in a field, discipline or practice, and their suitability to specific investigations. An ability to apply a range of methods to resolve problems or introduce change within a practice. An ability to identify, analyse, critically reflect on and address complex problems, applying evidence-based solutions and theory-driven arguments. An ability to make decisions and act ethically and professionally, and the ability to justify these decisions and actions drawing on appropriate ethical values and approaches within a supported environment. An ability to manage processes in unfamiliar and variable contexts, recognising that problem solving is context- and system-bound, and does not occur in isolation. | <ul style="list-style-type: none"> An ability to accurately identify, evaluate and address own learning needs in a self-directed manner, and facilitate collaborative learning processes. An ability to take full responsibility for own work, decision making and use of resources and limited accountability for the decisions and actions of others in varied or ill-defined contexts. An ability to develop appropriate processes of information gathering for a given context or use. An ability to independently validate sources of information, and evaluate and manage it. An ability to develop and communicate own ideas and opinions in well-structured arguments. |

9. FACULTY RULES

NAS1 – General rules

The **General Institutional Rules** of the UFS are set out in General Institutional Rules (First Qualification, as well as Advanced and Postgraduate Qualifications) for each year in the Rule Book of the University, and contains the following relevant information:

| GENERAL RULES FOR FIRST QUALIFICATIONS | | | |
|--|---|---|---|
| A1 – General rules | A2 – Applying for admission | A3 – Admission or readmission to the university and to an academic qualification | A4 – Submission of documentation required to register as a student |
| A5 – Duration of study and compiling a curriculum | A6 – Student registration and re-registration | A7 – Switching qualifications and/or modules and/or instructional modes and/or migrating to another university campus/centre | A8 – Credits accumulation and credits transfer |
| A9 – Assessment rules | A10 – Qualification with distinction | A11 – Results statements, academic records, study records, certified statements, certificates of conduct and certified examination timetables | A12 – Results statements, academic records, study records, certified statements, certificates of conduct and certified examination timetables |
| A13 – Requests on the basis of exceptional circumstances | A14 – Discipline | A15 – Financial support | A16 – Module and lecture venue timetable and examination timetable |
| A17 – Residence in campus accommodation | A18 – Fees payable | A19 – Information communication and information technology | |
| GENERAL RULES FOR POSTGRADUATE DIPLOMA | | | |
| A20 – General rules | A21 – Applying for admission | A22 – Admission or readmission to the university and to an academic qualification | A23 – Submission of documentation required to register as a student |
| A24 – Duration of study and compiling a curriculum | A25 – Student registration and re-registration | A26 – Switching qualifications and/or disciplines and/or modules and/or migrating to another university campus/centre | A27 – Credits accumulation and credits transfer |
| A28 – Assessment rules | A29 – Qualification with distinction | A30 – Qualification certificates | A31 – Intellectual property |
| A32 – Publication of a research essay | A33 – Results statements, academic records, study records, certified statements, certificates of conduct and certified examination timetables | A34 – Requests on the basis of exceptional circumstances | A35 – Discipline |
| A36 – Financial support | A37 – Module and lecture venue timetable and examination timetable | A38 – Residence in campus accommodation | A39 – Fees payable |
| A40 – Information communication and information technology | | | |
| GENERAL RULES FOR BACCALAUREUS HONOURS DEGREES | | | |
| A45 – General rules | A46 – Applying for admission | A47 – Admission or readmission to the university and to an honours bachelor's degree | A48 – Submission of documentation required to register as a student |
| A49 – Duration of study and compiling a curriculum | A50 – Student registration and re-registration | A51 – Switching qualifications and/or disciplines and/or modules and/or migrating to another university campus/centre | A52 – Credits accumulation and credits transfer |
| A53 – Assessment rules | A54 – Qualification with distinction | A55 – Qualification certificates, Dean's and Senate Medals | A56 – Intellectual property |
| A57 – Publication of a research essay | A58 – Results statements, academic records, study records, certified statements, certificates of conduct and certified examination timetables | A59 – Requests on the basis of exceptional circumstances | A60 – Discipline |
| A61 – Financial support | A62 – Module and lecture venue timetable and examination timetable | A63 – Residence in campus accommodation | A64 – Fees payable |
| A65 – Information communication and information technology | | | |

| GENERAL RULES FOR MASTER DEGREES | | | |
|--|---|--|--|
| A70 – General rules | A71 – Applying for admission | A72 – Admission or readmission to the university and to a master's degree | A73 – Submission of documentation required to register as a student |
| A74 – Mode of delivery | A75 – Requirements in respect of a master's research dissertation (dissertation) or publishable, interrelated articles (journal article option) or a coursework master's dissertation (mini-dissertation, extended essay or an essay) | A76 – Duration of study and compiling a curriculum | A77 – Student registration and re-registration |
| A78 – Modifying a research title | A79 – Supervisor(s) and co-supervisor(s) | A80 – Assessors and moderators | A81 – Switching qualifications and/or disciplines and/or modules and/or migrating to another university campus/centre |
| A82 – Credits accumulation and credits transfer | A83 – Assessment rules | A84 – Qualification with distinction | A85 – Qualification certificates, dean's medals and senate medals |
| A86 – Intellectual property | A87 – Publication of a master's research dissertation (dissertation) or a coursework master's dissertation (extended essay or essay) | A88 – Results statements, academic records, study records, certified statements, certificates of conduct and certified examination timetables | A89 – Requests on the basis of exceptional circumstances |
| A90 – Discipline | A91 – Financial support | A92 – Module and lecture venue timetable and examination timetable | A93 – Residence in campus accommodation |
| A94 – Fees payable | A95 – Information communication and information technology | | |
| GENERAL RULES FOR DOCTOR'S DEGREES | | | |
| A100 – General rules | A101 – Applying for admission | A102 – Admission or readmission to the university and to a doctorate | A103 – Submission of documentation required to register as a student |
| A104 – Mode of delivery | A105 – Requirements in respect of a thesis, publishable, interrelated articles (journal article option) or minithesis | A106 – Duration of study and compiling a curriculum | A107 – Student registration and re-registration |
| A108 – Modifying a research title | A109 – Promoter and co-promoter(s) | A110 – Assessors and moderators | A111 – Switching qualifications and/or disciplines and/or modules and/or migrating to another university campus/centre |
| A112 – Credits accumulation and credits transfer | A113 – Assessment rules | A114 – Qualification with distinction | A115 – Qualification certificates |
| A116 – Intellectual property | A117 – Publication of a thesis | A118 – Results statements, academic records, study records, certified statements, certificates of conduct and certified examination timetables | A119 – Requests on the basis of exceptional circumstances |
| A120 – Discipline | A121 – Financial support | A122 – Module and lecture venue timetable and examination timetable | A123 – Residence in campus accommodation |
| A124 – Fees payable | A125 – Information communication and information technology | | |
| GENERAL RULES FOR DOCTOR'S DEGREES (NQF Exit Level 10) | | | |
| A130 – General rules | A131 – Applying for admission | A132 – Admission to the higher doctorate | A133 – Student registration and re-registration |
| A134 – Mentor | A135 – Assessors | A136 – Requirements to be met when submitting scientific publications | A137 – Assessment reports |
| A138 – Pass requirements | A139 – Plagiarism | A140 – Qualification certificates | A141 – Fees payable |
| GENERAL RULES: HONORARY DEGREES | | | |
| A145 – Honorary-degree proposals | A146 – Qualification certificates | A150 – Convocation | |

The General Institutional Rules of the UFS apply to this faculty *mutatis mutandis* (A1 to A150). These **Rules of the UFS** are, with the necessary adjustments, applicable to all the qualifications that are awarded by the Faculty of Natural and Agricultural Sciences. Rules of the **Faculty of Natural and Agricultural Sciences (NAS)**, which specifically apply to the degree and other programmes presented in the Faculty, are equally important and relevant. Students must consult the new Rule Book every academic year before registration to ensure alignment with updated curricula, as the Faculty updates the Rule Book to keep abreast of the latest scientific developments. It is the student's **responsibility** to be conversant with these rules and the following rules are important.

NAS2 and NAS3 – Entrance and progress requirements

Undergraduate programmes

The faculty offers various undergraduate qualifications in different categories including Diplomas, Access and Extended programmes and Bachelor degrees. The following fields of study are covered in each of the categories at the main campus and on the Qwaqwa campus where indicated or where indicated on the Qwaqwa campus only:

- **Diplomas:** Advanced Diploma in Sustainable Agriculture in Rural Development.
- **Access and Extended Programmes:** University Preparation Programme: Agricultural Sciences for BAgric; University Preparation Programme: Natural and Agricultural Sciences(Mathematics and Chemistry) for BSc, Access: Natural and Agricultural Sciences (Mathematics and Chemistry) for BSc (Qwaqwa, Bachelor of Agriculture Extended Programme, Bachelor of Agricultural Sciences Extended Programme, Bachelor of Science Extended Programme (Mathematics and Chemistry) (Qwaqwa), Bachelor of Science Extended Programme (Mathematics and Finances).
- **Bachelor Degrees:**
 - **Bachelor of:**
 - o Architecture; Agriculture (Agricultural Management, Animal Production Management, Crop Production Management, Irrigation Management, Mixed Farming Management, Wildlife Management); Agricultural Economics, Consumer Sciences(General and Food);
 - **Bachelor of Science in:**
 - o Actuarial Sciences, Agricultural Economics,
- o Biological Sciences: Biochemistry and Botany, Biochemistry and Entomology, Biochemistry and Food Science, Biochemistry and Genetics, Biochemistry and Microbiology, Biochemistry and Physiology, Biochemistry and Statistics, Biochemistry and Zoology, Botany and Entomology, Botany and Genetics, Botany and Microbiology, Botany and Zoology, Entomology and Genetics, Entomology and Microbiology, Entomology and Zoology, Genetics and Microbiology, Genetics and Zoology, Microbiology and Zoology, Behavioural Genetics, Human Molecular Biology, Forensic Sciences, Botany and Plant Breeding, Plant Health Ecology, Botany and Plant Pathology, Environmental Rehabilitation, Botany (Qwaqwa), Entomology (Qwaqwa) Life Sciences (Qwaqwa), Zoology (Qwaqwa).
- o Building Sciences: Construction Management(residential), Quantity Surveying(residential), Construction Management (Distance learning), Quantity Surveying (Distance learning)
- o Chemical and Physical Sciences: Chemistry and Biochemistry, Chemistry and Botany (Qwaqwa), Chemistry and Food Science, Chemistry and Microbiology, Chemistry and Physics (Qwaqwa), Physics and Agrometeorology, Physics and Astrophysics, Physics and Engineering Subjects, Chemistry and Entomology (Qwaqwaonly), Chemistry and Zoology (Qwaqwaonly).
- o Consumer Science
- o Geosciences: Geographical Information Systems, Geography and Environmental Sciences, Geography and Statistics, Geography and Agrometeorology, Environmental Geography (Qwaqwaonly),Geology specialisation, Geochemistry, Environmental Geology, Geology and Chemistry, Geology and Geography, Geology and Physics.
- o Information Technology: Information Technology and Chemistry, Information Technology and Mathematical Statistics, Information Technology and Mathematics, Information Technology and Physics, Information Technology with Buisness and Management, Information Systems.
- o Mathematics, Mathematical Statistics and Statistical Sciences: Climate Science, Econometrics, Investment Sciences, Psychometrics, Mathematics and Applied Mathematics, Mathematics and Chemistry, Mathematics and Mathematical Statistics, Mathematics and Physics, Mathematics and Finances, Statistics and Accounting, Statistics and Economics, Statistics and Psychology.

• **Bachelor of Science in Agriculture in:**

- o Agrometeorology, Agronomy, Animal Sciences, Food Science, Grassland Sciences, Plant Breeding, Plant Pathology, Soil Sciences.

NAS2.1 – Faculty Undergraduate entrance requirements

In addition to the requirements contained in General Regulation A3.1–3.6, a candidate has to comply with the additional faculty requirements:

- a) Students should apply for admission to the programmes listed above on the prescribed form before the closing date.
- b) The following Bachelors and Bachelor of Science degrees require selection: Architecture, Construction Management, Forensic Sciences, Geology, Physics and Engineering Sciences and Quantity Surveying.
- c) Applications to these programmes, on the prescribed form, must reach the Registrar, Academic Student Services, on or before 31 July for Architecture, Quantity Surveying and Construction Management, or 30 September for the rest, the year before the intended registration. Students will be notified of preliminary selection before the end of October, but the final selection will only be confirmed after the National Senior Certificate (NSC) examination results are available.
- d) Admission depends on Admission Point (AP) or the M Scores (MS) as well as the performance in Mathematics (M), Physical Science (PS) and Life Sciences (LS). The Admission Point (AP) or the M Scores (MS) are calculated as indicated in Table 3:
- e) The entrance requirements in Table 4 below are a broad indication for entrance to the Faculty of Natural and Agricultural Sciences and applicable to prospective students. It is important to note that some programmes have higher requirements or the requirements are adjusted as indicated in Table 5.

Table 3: Calculating AP and M Scores

Calculation of the AP with regard to candidates who passed Grade 12 in 2008 onwards:

| NSC Performance level | UFS Admission Point (AP) | NSC Performance level | UFS Admission Point (AP) |
|-----------------------|--------------------------|-----------------------|--------------------------|
| 7 (90% – 100%) | 8 | 4 (50% – 59%) | 4 |
| 7 (80% – 89%) | 7 | 3 (40% – 49%) | 3 |
| 6 (70% – 79%) | 6 | 2 (30% – 39%) | 2 |
| 5 (60% – 69%) | 5 | | |

Calculation of the M score with regard to candidates who passed Grade 12 prior to 2008:

M Scores are calculated using the symbols of the six (6) best matriculation subjects (regardless of whether they are higher or standard grade) passed in one examination.

| Symbol | A | B | C | D | E | F |
|--------|---|---|---|---|---|---|
| HG | 8 | 7 | 6 | 5 | 4 | 3 |
| SG | 6 | 5 | 4 | 3 | 2 | 1 |

Table 4: Broad Entrance Requirements

| The following is applicable to students who matriculated before or during 2007: | The following is applicable to students who completed the National Senior Certificate during or after 2008: |
|---|---|
| (i) Senior certificate with matriculation endorsement (matriculation exemption) or an equivalent qualification. (ii) A minimum MS of 30. (iii) HG = E or SG = C in an official tuition language. (iv) Mathematics HG = D or SG = B. Alternatively at least a pass mark of 60% in MATD1564 or MATD1534 or MATM1584. If STSM1614 or MATM1614 is included in the learning programme at least a level 6 (70%) and at least a level 7 (80%) is respectively required for Mathematics. (v) Both Biology and Physical Science will be required. Take note that not all BSc programmes require both Life and Physical Sciences. See NAS 2.2 – table 5 for more detail. (vi) Biology HG = D or SG = B and Physical Science HG = E or SG = C. (vii) Participation in the NBT tests for Language. (viii) Participation in the NBT tests for Mathematics. | (i) NSC with an endorsement that allows entrance to degree studies or an equivalent qualification. (ii) A minimum AP of 30. (iii) A performance level 4 (50%) in an official tuition language. (iv) Mathematics on level 5 (60%). Alternatively at least a pass mark in MATD1564 or MATD1534 or MATM1584 is required. If STSM1614 or MATM1614 is included in the learning programme a level 6 (70%) and a level 7 (80%) is respectively required for Mathematics. Alternatively a pass mark of at least 70% in MATD1564 or at least 60% in MATM1584 or a pass in MATM1534 is required (v) Both Life Sciences and Physical Science must be offered. Take note that not all BSc programmes require both Life and Physical Sciences. See NAS 2.2 – table 5 for more detail. (vi) Life Sciences level 5 (60%) and Physical Science level 4 (50%). Alternatively, at least 60% is required in the modules CHEM1412, CHEM1532, CHEM1622 and CHEM1642. (vii) Participation in the NBT tests for Language. (viii) Participation in the NBT tests for Mathematics. |

- f) If students wish to transfer from other higher education institutions or another programme before they have completed their undergraduate studies must provide evidence of their academic progress, in the form of an academic record. These records will be used to determine which modules could be recognised in the UFS prescribed curriculum and at which level the student will be placed.

NAS2.2 – Specific undergraduate programme requirements

Table 5: Specific entrance requirements

| | |
|--|--|
| <p>(a) Advanced Diploma in Sustainable Agriculture in Rural Development</p> <ul style="list-style-type: none"> A related diploma or qualification at NQF Level 6. Applicants with different qualifications can be admitted if their qualifications are judged equivalent by a designated UFS panel through the Recognition of Prior Learning process. Applicants should have sound and proven experience relevant to the agricultural environment. Practical experience in agriculture and/or rural development, and appropriate prior learning are prerequisites for admission. This qualification is not envisaged for the individual passing directly on from the National Senior Certificate to subsequent NQF levels. | <p>(b) University Preparation Programme (Natural Sciences and Mathematics)</p> <ul style="list-style-type: none"> Requires a National Senior Certificate that allows entrance to diploma or higher certificate. Minimum AP of 20. Official tuition language with a minimum achievement level 3 (40%). Mathematics with a minimum achievement level 3 (40%). Life Sciences with a minimum achievement level 3 (40%) OR Physical Science with a minimum achievement level 3 (40%). |
| <p>(c) University Preparation Programme (Agricultural Sciences)</p> <ul style="list-style-type: none"> National Senior Certificate that allows entrance to diploma or higher certificate studies. Minimum AP of 20. Official tuition language with a minimum achievement level 3 (40%). Mathematical Literacy with a minimum achievement level 5 (60%) OR Mathematics with a minimum achievement level 2 (30%). | <p>(d) BAgric extended four-year</p> <ul style="list-style-type: none"> Requirement (i) in Table 4 above. A minimum AP of 25. Official tuition language with a minimum achievement level 4 (50%). Mathematics on performance level 2(30%) or Mathematical Literacy at least at level 5 (60%) if the AP score is above 26. |
| <p>(e) BSc extended four-year (Chemistry and Mathematics)</p> <ul style="list-style-type: none"> Requirement (i) in table 4 above. A minimum AP of 25. Official tuition language with a minimum achievement level 4 (50%). Mathematics on performance level 3 (40%). Life Sciences at performance level 4 (50%) or Physical Science on performance level 3 (40%). | <p>(f) BSc extended four-year (Mathematics and Finances)</p> <ul style="list-style-type: none"> Requirement (i) in table 4 above. A minimum AP of 25. Official tuition language with a minimum achievement level 4 (50%). Mathematics at performance level 3 (40%). |
| <p>(g) BSc (Agriculture) extended five year</p> <ul style="list-style-type: none"> Requirement (i) in table 4 above. A minimum AP of 25 and a performance level 4 (50%) in an official tuition language. Mathematics at performance level 3 (40%). Life Sciences or Agricultural Science at performance level 4 (50%) or Physical Science at performance level 3 (40%). | <p>(h) BAgric</p> <ul style="list-style-type: none"> Requirements (i)-(iii) & (vii) in table 4 above. Mathematics at performance level 3(40%) or Mathematical Literacy at least at level 7(80%) if the AP is 32 or above. |
| <p>(i) BSc majoring in Actuarial Science (4336)</p> <ul style="list-style-type: none"> Requirements (i), (iii)-(iv), (vii) & (viii) in table 4 above. A minimum AP of 34. Mathematics at performance level 7 (80%). | <p>(j) BSc (Agriculture)</p> <ul style="list-style-type: none"> Requirements (i)-(iv), (vii) & (viii) in table 4 above. Either Life Sciences, Agricultural Sciences or Physical Science. Performance level 5 (60%) for Life Sciences or Agricultural Sciences and Performance level 4 (50%) for Physical Science. |
| <p>(k) BSc majoring in Agricultural Economics</p> <ul style="list-style-type: none"> Requirements (i)-(iv), (vii) & (viii) in table 4 above. | <p>(l) B Consumer Sciences</p> <ul style="list-style-type: none"> Requirements (i)-(iii) & (vii) in table 4 above. |

Table 5: Specific entrance requirements

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| <p>(m) BArch</p> <ul style="list-style-type: none"> A selection process takes place before admission. A maximum number of 55 students are admitted. A student registered for a programme at the UFS and wishing to change to the BArch-programme, must contact the department on or before 31 May of the year before intended registration. Requirements (i)-(iii), (vii) & (viii) in table 4 above. Mathematics at performance level 4 (50%). All information pertaining to the selection process is available on the departmental website: www.ufs.ac.za/architecture; see 'Academic Information'. Applicants have to pass a preliminary selection process. Applicants who passed the preliminary selection will be invited to a selection interview at which a portfolio of creative work has to be presented. Qualifying applicants must write aptitude and NBT test and submit the results to the department before the selection interview. Students will be notified of the outcome not later than the end of November of the year before intended registration. | <p>(n) BSc majoring in Chemical and Physical Science</p> <ul style="list-style-type: none"> Requirements (i)-(iv), (vii) & (viii) in table 4 above. Physical Science at performance level 5 (60%) or Physical Science HG = E or SG = C. If Biological subjects is the second major Life Sciences at performance level 5(60%) is required. Students intending to offer Chemistry as a major must take note that In the second year a maximum of 80 and in the third year a maximum of 60 students will be admitted to the second year owing to laboratory constraints. These students will be admitted based on academic excellence. Students intending to register for engineering subjects must take note that limited space is available. <p>BSc majoring in Physics and Engineering Subjects:</p> <ul style="list-style-type: none"> AP score of ≥ 34 Mathematics and Physical Science ≥ 13 |
| <p>(p) BSc majoring in Biological Sciences with Genetics</p> <p>Please note a selection process is required for: GENE2616, GENE2626, GENE3714, GENE3724, GENE3734, GENE3744</p> <p>Students wishing to continue with any of these modules must apply for selection (genetics@ufs.ac.za). Only 150 students will be accepted based on academic performance.</p> | <p>(o) BSc majoring in Forensic Sciences</p> <ul style="list-style-type: none"> A selection process takes place before admission. A maximum number of 80 students will be admitted. NBT tests results will also be used for selection purposes. Applications close on 30 September 2013. Requirements (i), (iii)-(iv), (vii) & (viii) in table 4 above. A minimum AP ≥ 34 (with cumulative AP ≥ 17 for Mathematics, Life Science and Physical Science). No person with a criminal record will be allowed into this programme. <p>(q) BSc majoring in Geography</p> <ul style="list-style-type: none"> Requirements (i)-(iv) and (vii)& (viii) in Table 4 above. Physical Science at performance level 4(50%) to register for the Geographical Information Systems programme. Life Sciences at performance level 5(60%) is required for Environmental Sciences and Agrometeorology programmes. Life Science performance level 5(60%) or Physical Science performance level 4(50%) for the Statistics programme. |

Table 5: Specific entrance requirements

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| <p>(r) BSc majoring in Geology</p> <ul style="list-style-type: none"> A selection process takes place before admission. In the first year a maximum number of 80 students will be admitted to GLGY1614 owing to laboratory constraints. In the second and third year a maximum number of 60 students will be admitted due to laboratory constraints. These students will be admitted based on academic excellence. Students who have not obtain an average of at least 55% for GLGY1614 or GLGY1624 or failing GLGY1614 or GLGY1624 or any other prescribed first year module will not be able to continue their studies in any of the Geology programmes. Applications to the BSc Geology programme, on the prescribed form, must reach the Registrar, Academic Student Services, UFS, Bloemfontein, on or before 30 September of the year before the intended registration. Students will be notified of the outcome as soon as examination results are available and no later than January. The selection process will be based on academic performance. Requirements (i)-(iv), (vii) & (viii) in table 4 above. Physical Science and Mathematics at performance level 5 (60%) or Physical Science HG = E or SG = C. Alternatively, at least 65% is required in the modules CHEM1412, CHEM1532, CHEM1622 and CHEM1642, and in MATD1564/194. An AP of 34 or higher is highly recommended. | <p>(s) BSc (Information Technology)</p> <ul style="list-style-type: none"> Requirements (i)-(iii) and (vii)& (viii) in table 4 above. Mathematics at performance level 4 (50%) in order to register for MATM1574. Mathematics at performance level 5 (60%) to register for MATM1534. Mathematics at performance level 6 (70%) to register for STSM1614. Mathematics at performance level 7 (80%) in order to register MATM1614. Alternatively (senior students) a pass mark MATD1564 or in MATM1584. If Chemistry or Physics is the second major, Physical Science at performance level 4 (50%) is required. |
| <p>(s) BSc majoring in Mathematical Sciences</p> <ul style="list-style-type: none"> Requirements (i)-(iv), (vii) & (viii) in table 4 above. Mathematics at performance level 7 (80%). Alternatively (senior students) a mark of at least 70% in MATD1564/MATD1564 or at least 60% in MATM1584 (Main Campus) or 50% in MATM1534 is required. If Agrometeorology, or Chemistry or Physics is the second major Physical Science a performance level of 4 (50%) is required. If enrolling for Applied Statistics degrees only level 5(60%) for Mathematics is a required | <p>(t) BSc majoring in Quantity Surveying and BSc majoring in Construction Management</p> <ul style="list-style-type: none"> NSC with an endorsement that allows entrance to degree studies or an equivalent qualification. A minimum AP of 34. A performance level 4 (50%) in an official tuition language. Mathematics on level 5 (60%). One of Economics, Business Studies, Accounting or Physical Science on level 4 (50%) is recommended. A maximum of 10 students of the extended programme who passes Mathematics development modules and mainstream modules of at least 75%. B Tech QS/CM degree with an average of 65% and an AP 30 and above, with maximum of 80 credits will be considered. Nat Diploma in QS with an average of 75% and an AP 30 and above, with no credits considered. Other degrees: B Com with Economics III (60%) or Accounting II (60%), with a maximum of 80 credits will be considered; all other relevant degrees with an average of 60% in the exit year will be considered. A maximum number 50 students are considered. Application must be submitted before or on 31 July, the year before intended registration to the programme. |

NAS2.3 – Other requirements: Note to students applying for any programme in this faculty

- a) Students who score below 65% in the language NBT test must register for the language module EALN1508 or AGAN1508.
- b) First-time entering students with a performance level 5 in Mathematics or with a NBT mathematics score lower than 50% will have to attend compulsory extra Mathematics tutorial classes for three hours per week.
- c) First-time entering students with a performance level of 4 for Physical Science will have to attend compulsory tutorials in Chemistry and Physics if those subjects are included in their curriculum.
- d) Registration for extra modules has financial implications, and the extra modules do not contribute to the total number of credits required to obtain a degree.
- e) Students who have registered for the extra language module and more than one additional tutorial will not be able to register for the full curriculum and will only be allowed to register for three required modules per semester as prescribed in the learning programme.

Postgraduate programmes

The faculty offers various postgraduate qualifications including Postgraduate Diplomas, Honours, Master's, and Doctoral degrees.

The following Postgraduate Diplomas are presented:
Advanced University Diploma in Disaster Management

The Honours degrees are divided into two categories namely, Bachelor Honours degrees and Bachelor of Science Honours degrees. The following fields of study are covered in each of the categories:

- Bachelor Honours is offered in Architecture, Agricultural Management, Consumer Sciences, Spatial Planning.
- Bachelor of Science Honours degree is awarded in the following fields of study: Actuarial Sciences, Agricultural Economics, Agrometeorology, Astrophysics, Behavioural Genetics, Biochemistry, Botany (Qwaqwa), Chemistry (Qwaqwa), Computer Information Systems, Consumer Science, Construction Management, Entomology, Environmental Geography (Qwaqwa), Environmental Geology, Environmental Rehabilitation, Food Science, Forensic Genetics, Genetics, Geochemistry, Geography, Geography and Ecology, Geography and Environmental Science, Geohydrology, Geology, Life Sciences, Limnology, Mathematics and

Applied Mathematics, Mathematical Statistics, Microbiology, Physics (Qwaqwa), Plant Breeding, Plant Health Ecology, Plant Pathology, Polymer Science (only Qwaqwa) Soil Science, Statistics, Quantity Surveying, and Zoology (Qwaqwa).

The Master Degrees are divided into three categories, namely; Master Degrees, Master's of Sciences degrees, and Master's of Sciences in Agriculture degrees.

The following fields of study are covered in each of the categories:

- Master Degrees is offered in the following fields of study: Architecture, Architecture (Professional), Agricultural Management, Consumer Science, Disaster Management, Environmental Management, Human Settlements (MLHS Research), Irrigation Management, Sustainable Agriculture, Land and Property Development Management, Urban and Regional Planning (Professional) and Urban and Regional Planning (Research), Wildlife Management
- Master's of Science is awarded in the following fields of study: Agricultural Economics, Actuarial Sciences, Agrometeorology, Applied Mathematics, Astrophysics, Behavioural Genetics, Geographical Information Systems, Biochemistry, Botany, Chemistry, Computer Information Systems, Construction Management, Consumer Science, Entomology, Environmental Geology, Environmental Rehabilitation, Food Science, Forensic Genetics, Forensic Sciences, Forensic Sciences Interdisciplinary, Genetics, Geochemistry, Geography, Geography and Environmental Science, Geohydrology, Geology, Grassland Science, Limnology, Mathematics, Mathematical Statistics, Mathematical Statistics and Risk Analysis, Microbial Biotechnology, Microbiology, Nano Science Physics, Polymer Science, Plant Breeding, Plant Breeding Interdisciplinary, Plant Health Ecology, Plant Pathology, Soil Science, Statistics, Quantity Surveying, Zoology.
- Master's of Science in Agriculture are offered in the following fields of study: Agrometeorology, Agronomy, Animal Sciences, Food Science, Grassland Science, Plant Breeding, Plant Pathology, Soil Science.

PhD degrees are offered in the following fields of study:

- Actuarial Sciences, Architecture, Agricultural Economics, Agricultural Management, Agronomy, Agrometeorology, Animal Sciences, Astrophysics, Applied Mathematics, Behavioural Genetics, Geographical Information Systems, Biochemistry, Botany, Chemistry, Computer Information Systems, Construction Management, Consumer Science, Disaster Management, Environmental Management, Entomology, Environmental Geology,

Environmental Rehabilitation, Food Science, Forensic Genetics, Forensic Sciences, Forensic Sciences Interdisciplinary, Forensic Sciences, Genetics, Geochemistry, Geography, Geography and Environmental Science, Geohydrology, Geology, Grassland Science, Human Settlements (MLHS Research), Irrigation Management, Land and Property Development Management, Limnology, Mathematics, Mathematical Statistics, Microbiology, Microbial Biotechnology, Mineral Resource Throughput Management, Nanoscience, Physics, Plant Breeding, Plant Breeding Interdisciplinary, Plant Health Ecology, Plant Pathology, Polymer Science, Property Science, Quantity Surveying, Risk Analysis, Spatial planning, Soil Science, Statistics, Sustainable Agriculture, Urban and Regional Planning, Wildlife, Wildlife Management and Zoology.

DSc degrees are offered in the following fields of study:

- Actuarial Sciences, Agricultural Economics, Agronomy, Agrometeorology, Animal Sciences, Astrophysics, Applied Mathematics, Behavioural Genetics, Geographical Information Systems, Biochemistry, Botany, Chemistry, Computer Information Systems, Construction Management, Consumer Science, Environmental Management, Entomology, Environmental Geology, Environmental Rehabilitation, Food Science, Forensic Genetics, Forensic Sciences, Forensic Sciences Interdisciplinary, Forensic Sciences, Genetics, Geochemistry, Geography, Geography and Environmental Science, Geohydrology, Geology, Grassland Science, Limnology, Mathematics, Mathematical Statistics, Microbiology, Microbial Biotechnology, Mineral Resource Throughput Management, Nanoscience, Physics, Plant Breeding, Plant Breeding Interdisciplinary, Plant Health Ecology, Plant Pathology, Polymer Science, Quantity Surveying, Risk Analysis, Soil Science, Statistics, Wildlife and Zoology.

NAS3.1 – Admission requirements for the Advanced University Diploma

In addition to the requirements contained in General Regulation A3.2, a candidate has to comply with the additional faculty requirements:

- A applicant have at least a minimum three-year degree (at NQF Level 7) from any applicable field of study.
- A minimum average of 60% must be obtained in the final year of study.

- The student must prove to the Academic Departmental Head that he/she has adequate knowledge to justify admission to the programme.
- Applicants who do not have the formal minimum requirements must apply through Recognition of Prior Learning.
- Admission is subject to a selection process. Qualification and experience in the disaster management field will be an added advantage. It is a 1 year full-time and up to 2 years part-time programme.

1. Advanced University Diploma in Disaster Management

- Admission depends on previously acquired knowledge and experience in the disaster management field, as well as an appropriate NQF Level 7 qualification

NAS3.2 – Admission requirements for Bachelor Honours Degrees

In addition to the requirements contained in General Regulation A47, a candidate has to comply with the additional faculty requirements:

- A Bachelor degree or equivalent NQF Level 7 qualification including one of the following: BArch, BAgric, B Consumer Sciences, BSPHons, BSc (Information Technology), BSc majoring in Quantity Surveying or Construction Management and the following additional requirements per discipline.
- A deserving applicant in possession of a BSc degree with the required major subjects may be permitted by the Academic Departmental Head and with the approval of the Dean to receive postgraduate training in Agriculture. Such a student registers for BScHons (Agriculture), during which prescribed honours modules as well as certain additional undergraduate Agriculture modules may be taken in consultation with the departmental chair.
- All Honours degrees are selection courses and admission to these degrees is subject to approval of the departmental chair/Program Director.
- Applicants should apply for admission to the Honours degree on the prescribed form. These forms should be completed and handed to the Program Director at the beginning of the second semester. Selection will take place when results are available. The honours programmes start on a date as determined by the relevant department. All modules in the learning programme must be successfully completed.

NAS3.3 – Specific programme requirements for Honours degrees

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| 2. Architecture | <ul style="list-style-type: none"> • Application must reach the UFS before 31 May. • A selection process takes place before admission. A maximum of 45 students will be admitted. • All information pertaining to the selection process is available on the departmental website: www.ufs.ac.za/architecture; see 'Academic Information'. • To be eligible for BArch Hons selection, a candidate must have obtained a BArch degree or equivalent qualification from any other Architectural Learning Site with a collective average mark in his/her final year of 55% for the following modules or their equivalent, CONS3706, HARC3704 and TARC3704, as well as a subminimum of 60% for DESN3700 or its equivalent. • Candidates who do not comply with the above prerequisite must either repeat (only once) selected module(s) or work on the express recommendation of the Academic Department Head, in an architect's office for a year in order to be eligible for BArch Hons selection the following year. • Candidates may be required to attend a personal interview, present a portfolio and provide verified academic records. The final discretion on whether the candidate is regarded as being ready for the programme will rest with the selection panel. • Language proficiency in the medium of instruction that students want to do the programme (English or Afrikaans) will be tested as part of selection. |
| 3. Actuarial Science | <ul style="list-style-type: none"> • A candidate must have a BSc or BCom degree in Actuarial Science, as well as being qualified for at least four exemptions in the subjects of the Faculty / Institute of Actuaries, of which at least one exemption has to be for CT1, CT4 or CT6. |
| 4. Agricultural Economics | <ul style="list-style-type: none"> • A minimum of 60% in Agricultural Economics at third year level. |
| 5. Agriculture | <p>Agricultural Management, Irrigation Management, Wildlife Management</p> <ul style="list-style-type: none"> • A minimum of 60% in agricultural management and/or agricultural economics or equivalent modules at NQF 7 level. <p>Irrigation Management</p> <ul style="list-style-type: none"> • A minimum of 60% in Agricultural Engineering or equivalent at NQF 7 level. • Apart from the above mentioned requirements, the Academic Departmental Head may expect a student to complete certain additional courses. |
| 6. Agrometeorology | <ul style="list-style-type: none"> • Agrometeorology at third-year (NQF 7) level. |
| 7. Behavioural Genetics (Human Genetics) | <ul style="list-style-type: none"> • Admission into BSc Hons in Behavioural Genetics for students who majored in Genetics and Psychology or Zoology is subject to selection. A minimum of 60% in Genetics at third-year (NQF 7) level is required. Selection will take place during August each year. |
| 8. Biochemistry | <ul style="list-style-type: none"> • At least 64 credits in Biochemistry at third year level. An average of 65% in undergraduate Biochemistry modules. Admission is subject to a selection process. |
| 9. Botany | <ul style="list-style-type: none"> • A minimum of 60% in Botany at third-year (NQF 7) level and in consultation with the Academic Departmental Head. |
| 10. Chemistry | <ul style="list-style-type: none"> • To be considered for BSc Hons in Chemistry, a student must have a BSc degree. Other prerequisites include MATM1614 or MATM1534, plus MATM1624 or MATM1544. An average mark of 60% in CHEM3714, CHEM3734, CHEM3724 and CHEM3744 or equivalent NQF 7 level modules. |
| 11. Computer Information Systems | <ul style="list-style-type: none"> • A minimum average of 60% is required for the four third-year Computer Science modules (CSIS3714, CSIS3734, CSIS3724 and CSIS3744) or their equivalents. In exceptional cases students may be allowed in consultation with the programme director or Academic Departmental Head.. |
| 12. Consumer Sciences | <ul style="list-style-type: none"> • Consumer Science or relevant NQF at Level 7 at third-year (NQF 7) level with at least 60%. |
| 13. Construction Management | <ul style="list-style-type: none"> • A selection process takes place before admission. A maximum number of 30 students are admitted owing to classroom constraints. • Application must be submitted before or on 31 August, the year before intended registration to the honours programme. • Bachelors/BSc degree in Construction Management at NQF level 7 at an accredited institution with an average of 60% in exit year. |
| 14. Entomology | <ul style="list-style-type: none"> • Entomology at third-year (NQF 7) level. |

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| 15. Environmental Rehabilitation | <ul style="list-style-type: none"> A minimum of 60% in relevant modules at third-year (NQF 7) level and in consultation with the Academic Departmental Head. |
| 16. Food Science | <ul style="list-style-type: none"> Food Science at third-year (NQF 7) level. An average of 65% in undergraduate Food Science modules. Admission is subject to a selection process. |
| 17. Forensic Sciences | <ul style="list-style-type: none"> Admission into BSc Hon in Forensic Sciences is subject to selection. A minimum of 60% in relevant modules at third-year (NQF 7) level or equivalent modules are required. Selection will take place at the end of August each year. |
| 18. Genetics | <ul style="list-style-type: none"> Admission into BSc Hon in Genetics is subject to selection. A minimum of 60% in Genetics at third-year (NQF 7) level or equivalent modules are required. Selection will take place during August of the same year. |
| 19. Geography | <ul style="list-style-type: none"> A candidate must achieve an average pass mark of 60% for all Geography modules (64 credits) at third-year (NQF 7) level to be admitted to the honours degree. In exceptional cases the department may grant admission by virtue of an oral or written evaluation in which the candidate displays relevant knowledge of the theory and principles of the subject. Depending on a candidate's academic background, additional modules may be prescribed by the department. Proof of computer literacy is a prerequisite. A candidate's skills in English will be assessed and if the required standard is not met, additional modules (Proficient performance in the TALPS Test is required) will be prescribed. For admission to the examination, a semester mark or year mark of at least 50% is required for each module. A candidate must pass with an average mark of 60% for all 3rd year Geography subjects OR pass with an average of 60% for all Geography subjects. |
| 20. Geology, Geochemistry and Environmental Geology | <ul style="list-style-type: none"> For admission to the honours degree in Geology, Geochemistry or Environmental Geology a candidate must achieve a combined average pass mark of 60% in four Geology modules (64 credits) at third-year (NQF 7) level (two modules in the first semester and two in the second semester, including GLGY3714 and GLGY3724 or equivalent modules). Students must complete all required NQF Level 7 Geology modules in a maximum of two years. Students who have completed their Geology modules in the first attempt will be given preference. Thirty students will be admitted to the Geology honours programme. However the Geochemistry and the Environmental Geology programme can only accommodate a maximum of five students. Proficient performance in the TALPS Test is required. |
| 21. Geographical Information Systems | <ul style="list-style-type: none"> Geography at third-year (NQF 7) level or equivalent Geography at NQF 7 at another university with at least 64 credits in total in this subject area. Minimum average of 60% in the third year. B.Sc in Geography with an average of 60% of 3 year modules. |
| 22. Geohydrology | <ul style="list-style-type: none"> A degree in Engineering or a BSc or a BScAgric degree. An average of 60% in the final year of a BSc degree calculated from the major subject, as well as Geology, Chemistry, and Mathematics or Statistics on first-year level is required for admission to the degree. The candidate compiles his/her curriculum in consultation with the Director of the Institute of Groundwater Studies. |
| 23. Grassland Science | <ul style="list-style-type: none"> Grassland Science at third-year (NQF 7) level. |
| 24. Home Economics | <ul style="list-style-type: none"> BSc Home Economics, B Consumer Science or an equivalent qualification. |
| 25. Life Sciences | <ul style="list-style-type: none"> A person must pass with an average of 60% for all third year and second year Life science subjects and consult with the Departmental Head after a meeting has taken place where Honours applications are considered. |
| 26. Limnology | <ul style="list-style-type: none"> A BSc or BScAgric degree with at least one of the following as major: Biochemistry, Botany, Chemistry, Entomology, Mathematics, Microbiology, Physics, Soil Science, Zoology. |
| 27. Mathematics and Applied Mathematics | <ul style="list-style-type: none"> At least four Mathematics and Applied Mathematics or equivalent modules, at third-year (NQF 7) level, completed with an average mark of 60%. In addition, all applicants will have to write and pass an admission examination to verify sufficient background and foundational mathematics knowledge. If necessary, students may be required to take additional undergraduate modules as supplementary prerequisites for certain honours modules. Proficient performance in the TALPS Test is also required before enrolment. Students may be required to take additional undergraduate courses based on their academic background. The Academic Departmental Head grants admission and consults on the compilation of the curriculum. Students will do an oral presentation for their final assessment. Proficient performance in the TALPS Test is required. |
| 28. Mathematical Statistics | <ul style="list-style-type: none"> A minimum average pass mark of 60% in STSM3714, STSM3724, STSM3734 and STSM3744 or equivalent NQF 7 level modules |
| 29. Microbiology | <ul style="list-style-type: none"> At least 64 credits in Microbiology at third-year (NQF 7) level. An average of 65% in undergraduate Microbiology modules. These include FSCB3724 and BOCM3714. Admission is subject to a selection process. |
| 30. Physics | <ul style="list-style-type: none"> An average mark of 60% in PHYS3714, PHYS3732, PHYS3752, PHYS3724, PHYS3742 and PHYS3762. The Academic Departmental Head may grant permission for admission to the honours degree in exceptional cases. The programme commences in middle January and students must apply for admission to the Academic Departmental Head before that date. |
| 31. Plant Breeding | <ul style="list-style-type: none"> A minimum of 60% average for all the Plant Breeding modules on third-year (NQF 7) level is required. |

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| 32. Plant Health Ecology | <ul style="list-style-type: none"> Plant Health or equivalent modules at third-year (NQF 7) level. |
| 33. Plant Pathology | <ul style="list-style-type: none"> An average of 60% for the third year in a BSc or BSc Agric degree with the following as major: Plant Pathology or equivalent NQF level 7 modules. Students may be required to take additional undergraduate courses based on their academic background. |
| 34. Polymer Science | <ul style="list-style-type: none"> A minimum of 60% average for all the Chemistry modules on third-year (NQF 7) level is required. |
| 35. Soil Science | <ul style="list-style-type: none"> Soil Science at third-year (NQF 7) level. |
| 36. Statistics | <ul style="list-style-type: none"> MATM1614 and MATM1624, as well as a minimum average mark of 60% in STSA2616, STSA2626, STSA3716 and STSA3726. |
| 37. Spatial Planning | <ul style="list-style-type: none"> A person may be considered for selection and admitted to the programme in Spatial Planning if he/she is in possession of an appropriate qualification at NQF Level 7 (SAQA certificate must accompany the qualification when requested), as approved by the Academic Departmental Head and has an average of at least 60% in previous qualifications.. Applicants may have to write selection tests if they are considered to be suitable for selection. These tests, and possible interviews, may be conducted on the Bloemfontein Campus, at a pre-arranged time and date. If a student does not entirely meet the admission requirements, the Academic Departmental Head and the Recognition of Prior Learning office in consultation with the Dean may, in meritorious cases, recommend that some concessions be made in respect of the requirements. The final decision shall rest with the Dean, or shall be determined by the Recognition of Prior Learning office. Supplementary courses, as determined by the Head of the Department, may be required; or a student may be expected to do an extra year of study in order to complete the programme. Proficient language skills in the medium of instruction (English or Afrikaans) may be tested as part of selection. An acceptable module in the use of language as determined by the Academic Departmental Head, will have to be taken at the students' own cost and passed should he/she not comply with the required standard. |
| 38. Quantity Surveying | <ul style="list-style-type: none"> A selection process takes place before admission. A maximum number of 30 students are admitted owing to classroom constraints. Application must be submitted before or on 31 August, the year before intended registration to the honours programme. Bachelors/BSc degree in Quantity Surveying at NQF level 7 at an accredited institution with an average of 60% in exit year. |
| 39. Wildlife | <ul style="list-style-type: none"> Grassland Science at third-year (NQF 7) level or equivalent modules and in consultation with the Academic Departmental Head.. |
| 40. Zoology | <ul style="list-style-type: none"> Zoology at third-year (NQF 7) level. |

NAS3.4 – Admission requirements for MASTER DEGREES

In addition to the requirements contained in General Regulation A72, a candidate has to comply with the additional faculty requirements:

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| <p>(a) All MASTER DEGREES are selection programmes and admission to these degrees is subject to approval of the Academic Departmental Head.</p> <p>(b) Applicants must apply for admission to the Master's degree on the prescribed form. These forms are completed and submitted to the Program Director at the beginning of the second semester. Selection will take place when the results are ready. The Master's courses start on a date as determined by the relevant department. Each module in the learning programmes must be successfully completed.</p> | <p>(c) Applicants must have an applicable Honours degree or equivalent NQF Level 8 qualification and the additional requirements per discipline (see Reg. NAS3.5).</p> <p>(d) If a student does not entirely meet the admission requirements, the Dean may, in consultation with the Head of the Department, in meritorious cases, recommend that some concessions be made in respect of the requirements.</p> <p>(e) Bachelor of Science Honours or relevant Honours degree on NQF level 8 with an average of 60% in the exit year of the relevant degree and included at least 30 credits of research and an AP of 30 and above, may be recognized as meeting the minimum entry requirements for a Masters Degree programme.</p> |
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NAS3.5 – Specific programme requirements for Master's Degree

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| 1. Master of Architecture (for Professional registration) | <ul style="list-style-type: none"> • Application must reach the UFS before 31 May. • A selection process takes place before admission. A maximum number of 45 candidates will be admitted. • All information pertaining to the selection process is available on the departmental website: www.ufs.ac.za/architecture; see 'Academic Information'. • To be eligible for MArch selection a candidate must have obtained a BArchHon degree or equivalent qualification from any other Architectural learning site with a joint average mark in his/her final year of 55% for the following modules or their equivalent: CONS6808, HURB6804 and RARC6808, as well as a subminimum of 60% for DESN6800 or its equivalent. • Candidates who do not comply with the above prerequisite must either repeat (only once) selected module(s) or work in an architect's office for a year in order to be eligible for BArch Hons selection the following year. • Candidates may be required to attend a personal interview, present a portfolio and provide verified academic records. • Qualifying candidates must submit a research proposal as determined and communicated by the Academic Department Head. The final discretion whether the candidate is regarded as ready for the programme will rest with the selection panel. |
| 2. Master of Architecture (for extended research) | <ul style="list-style-type: none"> • Apart from the general regulations the following is applicable: • Candidates must have obtained EITHER the advanced postgraduate professional qualification, BArch or an equivalent thereof OR the BArchHon or its equivalent. • Candidates who are in possession of the BArchHon must prove that a Design Dissertation formed part of the requirements for the conferment of such degree. • Candidates who are in possession of the BArchHon must have obtained a minimum of 60% in THREE of the following modules or their equivalent: DESN6800, CONS6808, HURB6804 and RARC6808. • Qualifying candidates must submit a dissertation proposal as determined and communicated by the Academic Department Head. The final discretion whether the candidate is regarded as being ready for the programme will be the selection panel's. |
| 3. Master of Agriculture | <p>Apart from the general regulations, the following apply:</p> <ul style="list-style-type: none"> • Students must convince the specific Academic Department Head that he/she has sufficient knowledge of the subject to be admitted to the programme. |
| 4. Master of Disaster Management | <p>Apart from the general regulations the following is applicable:</p> <ul style="list-style-type: none"> • A candidate must in order to be admitted to this Master's programme have: <ul style="list-style-type: none"> o a disaster management Honours degree or equivalent from any other institution (Minimum 120 Credits, NQF Exit Level 8) with an average pass mark of 60%, OR o an Advanced University Diploma in Disaster Management from the UFS or any other institution (Minimum 120 Credits, NQF Exit Level 8) with an average pass mark of 60%. • A candidate must prove to the Academic Departmental Head that he/she has: <ul style="list-style-type: none"> o adequate knowledge to justify admission to this study. o practical and/or preparatory experience which will be an added advantage. • A candidate must submit a research proposal together with the application. <p>NB: An Executive Committee of the UFS will assess the extent, nature and suitability of experience or preparatory studies mentioned above.</p> |
| 5. Master of Environmental Management | <p>Apart from the general regulations the following is applicable:</p> <ul style="list-style-type: none"> • A three-year degree (on NQF Level 7) or an equivalent qualification with appropriate experience will be considered by the University for admission. Depending on the academic background of the candidate, additional modules may be prescribed. • Where a candidate with merit does not comply fully with the admission requirements, the Dean, in conjunction with the Faculty Management Committee, may recommend that the requirements be partially waived. • As only a limited number of candidates can be accepted, an application form available from the Centre for Environmental Management (cem@ufs.ac.za) must be submitted by the end of September of the preceding year, after which selection will take place. |

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| 6. Master of Land and Property Development in Housing | <p>Apart from the general regulations the following is applicable:</p> <ul style="list-style-type: none"> A candidate who wishes to enrol for the degree must have a 60% average in one of the following: <ul style="list-style-type: none"> - an applicable four-year degree plus applicable practical experience and/or applicable preparatory studies, OR - an applicable Honours degree, or an Honours degree plus applicable studies, and/or practical experience. A candidate must submit a research proposal together with the application. |
| 7. Master of Land and Property Development Management | <p>In addition to the requirements contained in General Regulation A3.1-3.6, a candidate has to comply with the additional faculty requirements:</p> <ul style="list-style-type: none"> Students should apply for admission to the programme listed above on the prescribed form before the closing date, 31 August. Bachelor of Science Honours or relevant Honours degree on NQF level 8 with an average of 60% in the exit year of the relevant degree and included at least 30 credits of research and an AP of 30 and above, may be recognized as meeting the minimum entry requirements to this Masters Degree programme. In addition to these requirements the General Institutional Rules, Regulation for Master's Studies of the UFS as well as the additional Natural and Agricultural Sciences faculty requirements per discipline (see Reg. NAS3.5). A selection process takes place before admission. A maximum number of 25 students are admitted owing to classroom constraints. Application must be submitted before or on 31 August each year of the year before intended registration. |
| 8. Master of Sustainable Agriculture | <p>Apart from the general regulations the following is applicable:</p> <ul style="list-style-type: none"> A candidate who wishes to enrol for the degree must have one of the following: <ul style="list-style-type: none"> - an applicable three-year degree plus applicable practical experience and/or applicable preparatory study, OR - an applicable four-year degree plus applicable practical experience and/or applicable preparatory studies, OR - an applicable Honours degree, or an Honours degree and applicable studies, and/or practical experience. <p>NB: The scope, nature and applicability of practical experience and preparatory study in Reg. NAS3.4 (a) and (b) above will be determined by the Director of the Centre for Sustainable Agriculture</p> |
| 9. Master of Urban And Regional Planning (Research) | <p>Apart from the general regulations the following is applicable:</p> <ul style="list-style-type: none"> A candidate who wishes to enrol for the degree, must have a 60% average in one of the following: <ul style="list-style-type: none"> - an applicable four-year degree plus applicable practical experience and/or applicable preparatory studies OR - an applicable Honours degree, or an Honours degree and applicable studies, and/or practical experience. A candidate must submit a research proposal together with the application. |
| 10. Master of Urban and Regional Planning (Professional) | <p>Apart from the general regulations the following is applicable:</p> <ul style="list-style-type: none"> A person may be admitted to the programme in Urban and Regional Planning if he/she is in possession of one of the following qualifications with an average pass mark of at least 60% and has the necessary academic background: <ul style="list-style-type: none"> Bachelor Honours in Urban and Regional Planning. A degree similar to a Bachelor Honours in Urban and Regional Planning (missing modules for the Bachelor Honours in Spatial Planning must be completed). Bachelor in Land and Property Development Management (missing modules for the Bachelor Honours in Spatial Planning must be completed). Applicants may have to write selection tests if they are considered to be suitable for selection. These tests, and possible interviews, may be conducted on the Bloemfontein Campus, at a pre-arranged time and date. Supplementary courses, as determined by the Head of the Department, after consultation with the Dean and/or the Recognition of prior Learning, may be required; or a student may be expected to undergo an extra year of study in order to complete the programme if a he/she does not entirely meet the admission requirements. A candidate must submit a research proposal together with the application. |

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| 11. Master of Science | <p>Apart from the general regulations the following is applicable to the different disciplines:</p> <ul style="list-style-type: none"> • Geohydrology <ul style="list-style-type: none"> - An applicable Honours degree with a minimum average pass mark of 65% is required. Additional coursework may be prescribed where candidates do not have the required background in Geohydrology. In special cases admission may be allowed in consultation with the Director of IGS. • Limnology <ul style="list-style-type: none"> - Candidates in possession of a BSc Hons degree in Limnology are admitted to this course for which a dissertation (LIMG8900 – 180 credits) is required, based on an approved research project. Persons in possession of a BSc Hons or BScAgric Hons degree in a related field of study must, in addition to the dissertation, successfully complete theoretical work and assignments (4) in Limnology in order to gain Honours status in Limnology before the dissertation is handed in for examination. The Limnology Committee will appoint supervisors and decide in which department a candidate will register. For further information: 051 401 2863. • Mathematics or Applied Mathematics <ul style="list-style-type: none"> - For admission to a Master's degree in Mathematics or Applied Mathematics, the candidate needs Mathematics or Applied Mathematics, or the equivalent at Honours level. In addition, all applicants will have to write and pass an admission examination to verify sufficient background and foundational mathematics knowledge. If necessary, students may be required to take additional undergraduate modules as supplementary prerequisites for certain Masters' modules. Proficient performance in the TALPS Test is required before enrolment. Candidates may be required to take additional modules if their relevant background is insufficient. Proficient performance in the TALPS Test is required. • Mathematical Statistics <ul style="list-style-type: none"> - An appropriate Honours degree and mathematical background is required. Admission is subject to the approval of the Academic Departmental Head. • Computer Information Systems <ul style="list-style-type: none"> - An applicable Honours degree with a minimum average pass mark of 60% is required. • Geology <ul style="list-style-type: none"> - Proficient performance in the TALPS Test is required. |
| 12. Master of Science in Agriculture | <p>Apart from the general regulations the following is applicable:</p> <ul style="list-style-type: none"> • The candidates must convince the head of the department/centre concerned that he/she has adequate knowledge of the subject to justify admission to the study. • In the case of Animal, Grassland Sciences and Food Science admission to the study is subject to the approval of a postgraduate selection committee and Academic Departmental Head. Approval will be based on a satisfactory study record and appropriate qualification, or experience obtained. Additional modules may be required before admission to the MScAgric study is granted. Student must complete DATA2614 and DATA2624 before degree is awarded. Not applicable for Plant Breeding. |
| 13. Master of Science in Home Economics | <ul style="list-style-type: none"> • No additional requirements. |
| 14. Master of Science in Construction Management | <p>In addition to the requirements contained in General Regulation A3.1-3.6, a candidate has to comply with the additional faculty requirements:</p> <ul style="list-style-type: none"> • Students should apply for admission to the programme listed above on the prescribed form before the closing date, 31 August. • Bachelor of Science Honours or relevant Honours degree on NQF level 8 with an average of 60% in the exit year of the relevant degree and included at least 30 credits of research and an AP of 30 and above, may be recognized as meeting the minimum entry requirements to the Masters Degree programme. • In addition to these requirements the General Institutional Rules, Regulation for Master's Studies of the UFS as well as the additional Natural and Agricultural Sciences faculty requirements per discipline (see Reg. NAS3.5). • A candidate must submit a research proposal together with the application. |
| 15. Master of Science in Quantity Surveying | <p>In addition to the requirements contained in General Regulation A3.1-3.6, a candidate has to comply with the additional faculty requirements:</p> <ul style="list-style-type: none"> • Students should apply for admission to the programme listed above on the prescribed form before the closing date, 31 August. • Bachelor of Science Honours or relevant Honours degree on NQF level 8 with an average of 60% in the exit year of the relevant degree and included at least 30 credits of research and an AP of 30 and above, may be recognized as meeting the minimum entry requirements to the Masters Degree programme. • In addition to these requirements the General Institutional Rules, Regulation for Master's Studies of the UFS as well as the additional Natural and Agricultural Sciences faculty requirements per discipline (see Reg. NAS3.5). • A candidate must submit a research proposal together with the application. |

NAS3.6 – Transfer between higher degree studies

- In consultation with the supervisor(s) and on the recommendation of the supervisor(s), the Academic Departmental Head and the Research Committee of the faculty, a candidate who has been admitted for the Master's degree in terms of Reg. A80 may, after a study and registration period of at least one year, apply to be allowed to continue his/her studies at the PhD degree level. Following admission to the PhD, at least two years must elapse before the PhD degree can be conferred. The period of study for the degree will therefore be at least three years.
- The MSc degree may be conferred upon a candidate if:
 - o the candidate withdraws his candidature for the PhD degree, or
 - o his candidature for the PhD degree is cancelled, or
 - o the candidate does not meet the requirements for the Doctoral degree

NAS3.7 – Admission requirements for a doctoral degree

In addition to the admission requirements contained in General Regulation A106, a candidate has to comply with the following additional faculty requirements apply:

- All PhD degrees are selection programmes and admission to these degrees is subject to approval by the Academic Departmental Head.
- The PhD candidate must show that he/she has sufficient knowledge of the subject prior to admission. Students should apply for admittance to the doctoral degree on the prescribed form. These forms should be completed and submitted to the Academic Departmental Head.
- The PhD candidate must have a Master's degree or equivalent NQF Level 9 qualification. Master Degrees include: MArch, MArch, MLPM (M.Prop), MSc, MAgric, MSc (Agriculture), MEM, MSA, MSc (Construction Management), MSc (Quantity Surveying), MURP, or MDM. The following additional requirements for specific disciplines apply:

NAS3.8 – Specific programme requirements for doctoral degrees

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| (a) Disaster Management | <ul style="list-style-type: none"> • In order to be admitted to the PhD, a candidate must be in possession of an relevant Master's degree and specific/ relevant modules in the postgraduate diploma in disaster management. Depending on the background and knowledge that the applicant has, some core disaster management modules may be required in order to equip the student with adequate disaster management knowledge. A candidate's thesis is written under the guidance of a promoter, and the thesis must demonstrate that the candidate is able to conduct independent scientific research. |
| (b) Limnology | <ul style="list-style-type: none"> • In order to be admitted to the PhD, a candidate must be in possession of an MSc in Limnology. Candidates in possession of an MSc degree in a related field of study will, in addition to the dissertation, have to complete theoretical work and assignments (4) in Limnology before the thesis can be submitted for examination. Two assignments shall take the form of presentations, and an oral examination takes place. • The Limnology Committee will appoint supervisors and decide in which department a candidate should register. |
| (c) Environmental Management | <ul style="list-style-type: none"> • In order to comply with the admission requirements, a candidate must possess a MEM degree before registering for the PhD degree. Individuals holding another Master's degree may be considered for admission. In such instances the Management Committee of the Centre for Environmental Management may supplement the thesis with assignments, taken from the PGDIP Environmental Management or Integrated Water Management Learning Program course, which must be completed prior to the thesis being submitted for examination. The Management Committee of the Centre for Environmental Management will assign promoters and decide in which department a candidate should register. |
| (d) Microbial Biotechnology | <ul style="list-style-type: none"> • A candidate must be in possession of a Master's degree in Microbiology, Biochemistry, Food Science, Microbial Biotechnology or related disciplines. Candidates in possession of a Master's degree in related subjects (e.g. Botany, Zoology, Chemistry, Chemical Engineering) can be requested by the Microbial Biotechnology Committee to complete additional theoretical work, work assignments, and/or modules before the thesis is submitted for examination. |
| e) Geology | <ul style="list-style-type: none"> • Proficient performance in the TALPS Test is required |

NAS4 – Progress requirements

Regulation A8(c) indicates that a student must complete his/her studies in the minimum prescribed study period plus two years. This is known as the residential period. Most of the undergraduate programmes in this faculty thus have a residential period of five years, except BScAgric and BSc Extended programmes which have a six year residential period.

- a) Students must successfully complete a minimum of 64 mainstream credits per year to be allowed to register the following year. Students who do not obtain a minimum of 64 credits per year will automatically be **BLOCKED FOR REGISTRATION** in the faculty. They will be expected to re-apply in order to be re-admitted to this faculty.

Students must therefore pass a minimum of 32 credits per semester to be allowed to register the following semester. Students who fail to obtain 32 credits after the first semester will automatically be blocked for registration. They can appeal to the Faculty Admissions Committee for re-admission. The appeal form must be completed and submitted to the Office of the Dean two days after the results of the supplementary examination are available.

- b) Students will only be allowed to repeat a module once if they meet the minimum requirements for repetition.

If a student only requires 32 credits to obtain a qualification and has not exceeded the residential period, special permission may be granted to repeat a module for the **SECOND** time. No first-year module can be repeated more than once.

- c) In order to repeat a module, a student must have completed that module and obtained a semester mark of at least 30 %. Students can follow the appeal process and the Appeal Committee could consider the matter on the basis of merit.

- d) Students in the Faculty of Natural and Agricultural Sciences will only be allowed to repeat 9 (12) modules in their three- or four-year study programme.

- e) Class attendance is required for students who have to register for the same module a second time. In the event of timetable clashes between repeated and new modules, preference must be given to the module being repeated. In such cases, students may not register for the new module.

- f) Students who do not pass all their required first-year modules (at least 120 main stream credits) in three years, and have at least obtained 48 second-year credits, will not be allowed to re-register to the Faculty of Natural and Agricultural Sciences.

- g) Students must pass a minimum of 80 credits to be able to register for modules in a subsequent study year of a learning programme.
- h) Students cannot register for third-year modules if any first-year modules are outstanding.
- i) Students must complete their degrees within the residential period. If it becomes evident that the student will not be able to comply with this regulation, the student can be deregistered even if the residential period has not been reached.
- j) Students who do not comply with i), but have a maximum of 4 modules outstanding, will only be allowed to conditionally register for one more semester. The student must then pass all the modules that they are registered for in that semester. Approval by the Faculty Admissions Committee is needed. Applications for conditional registration close on 31 August of their fifth study year for outstanding first semester modules and 31 January after completion of their fifth year for outstanding second semester modules.
- k) Students repeating modules can only register for a maximum of 64 credits per semester. Special permission may be granted for adding one 16-credit module.
- l) Students may only register for one additional 16-credit module per semester, over and above the number of prescribed modules required in the learning programme. Approval will depend on the academic record of the student.
- m) Opportunity exists in the Faculty of Natural and Agricultural Sciences to appeal against the decision made by the Programme Director and/or delegated Representative. A student may submit an appeal to a decision, which must contain supporting documentation that substantiates the situation, to the Appeals Committee of the Faculty. The Appeals Committee consists of the Teaching and Learning Manager and at least two other senior academics within the faculty. The Appeals Committee deliberates the cases before the semester starts. Appeal applications must be submitted to the Office of the Dean five working days before the semester starts. Results of the appeal will be available before the semester starts.
- n) Students must obtain at least 45% for a semester mark to participate in the examination.

NAS5 – Module requirements

- (a) Students must comply with the requirements of the specific programme and specific modules. All prerequisites for modules presented in the learning programmes in the faculty are provided under module contents p.83.

- (b) Some modules require selection and students will only be allowed to register for that specific module after approval of the Programme Director.
- (c) Students who passed Grade 12 Information Technology at performance level 5 or Computer Application Technology (CAT) at performance level 6 are exempted from CSIQ1531/CSIL1551.
- (d) For some modules the minimum prerequisite applies. The requirement is a semester/year mark or an examination mark of 40% in the relevant module. It is indicated as, for example, Min. (MATM1614), if MATM1614 is the relevant module.
- (e) If a co-requisite is required and the modules are taken for the first time, the module prescribed as co-requisite must be taken simultaneously with the relevant module. For example, to take GLGY2642, the prerequisites are 55% average for GLGY1614 and GLGY1624 and the co-requisite with GLGY2644.

NAS6 – Students from other faculties

- (a) Students from other faculties who register for subjects in the Faculty of Natural and Agricultural Sciences must comply with the minimum regulation requirements, as set out in NAS2.1 and NAS2.2 and with the prerequisite for specific modules as indicated in the module content on p.81.

NAS7 – Learning programme

Students have to:

- Select a learning programme.
- Follow the specific prescribed curriculum.
- Select one of the Biological Sciences, Mathematical Sciences, Chemical and Physical Science, Geosciences, Information Technology and Consumer Sciences fields of interest for BSc degrees; or Soil Crop and Climate, Animal Wildlife and Grassland, Agricultural Economics, or Food Science for one of BScAgric degrees; or Crop Production, or Animal Production fields of interest for the BAgric degrees.
- Verify that all the selected modules are included in the **class and examination timetable**.
- Verify that the **prerequisites** prescribed for every module are met.
- Be aware that elective modules can be exchange with each other, but all compulsory modules must be successfully completed.

NAS7.1 – The selection of a learning programme

- a) Students are only allowed to change to different fields of interests or degrees within the faculty at the end of their first year of study. If a student changes from one field of interest to another, higher studies must be completed in a maximum of five or six years, depending on the field of interest.
- b) Students can change within fields of interests only up to the second year of study; this does not grant them permission to extend the duration of study beyond five years.
- c) Students who change from one major within a complementary learning programme could have an extension on their study duration.

NAS7.2 – Minimum credit allocation

A degree cannot be conferred if the minimum credit requirements are not met and the prescribed curriculum are not fully completed:

- (a) **All Degrees**
If a student want endorsement with **two majors**, at least 60 credits per major discipline at NQF Level 7 is required.
- (b) **BArch, BAgric, B Consumer Sciences, BSc, BSc (Information Technology), BSc majoring in Quantity Surveying or BSc majoring in Construction Management**
A total of at least 360 credits, with a maximum of 120 credits at NQF Level 5 and 120 credits on Level 6, must be obtained over three years. At least 60 credits must be from one discipline and at NQF Level 7.
For BScQS and BScCM the 60 credits and NQF level 7 will not be from one discipline.
- (c) **BSc Extended Programme (four years):**
A total of at least 474 credits, of which at least 112 credits must be developmental modules, a maximum of 208 credits at NQF Level 5 and at least 120 credits at NQF Level 7 must be obtained over four study years.
- (d) **BSc (Agriculture) Extended Programme (five years):**
A total of at least 594 credits, of at least 104 credits must be developmental modules, a maximum of 112 credits at NQF Level 5 and at least 120 credits at NQF Level 8 must be obtained over four study years.
- (d) **BSc (Agriculture), BSc (Home Economics) (four years):**
A total of at least 480 credits, with a maximum of 96 credits at NQF Level 5 and at least 120 credits at NQF Level 8 for the degree must be obtained over four years. At least 60 credits must be from the minor discipline at NQF Level 7.

- (e) **BSc (Agriculture) Extended Programme (five years):** A total of at least 592 credits, of which at least 112 credits must be developmental modules, a maximum of 208 credits at NQF Level 5 and at least 120 credits at NQF Level 8 must be obtained over five study years.

NAS7.3 – Changing from BAgric to BSc (Agriculture)

- (a) A student who has registered for the BAgric degree can change to a suitable learning programme in the BSc (Agriculture) degree in consultation with Academic Student Services and the Programme Director of Agriculture. The student must have passed the compulsory first academic year of the BAgric degree with an average mark of at least 75%. In addition, compulsory first-year modules such as MATM1534, CHEM1514 and STSB1624 and other required modules to comply with the minimum prerequisites for professional registration (SACNASP).

NAS8 – Assessment examination and promotion

NAS8.1 – Examination and promotion system

In addition to the requirements contained in General Regulation A28, a candidate has to comply with the additional faculty requirements:

- (a) The guidelines as set out in the study guide for assessment method and calculation of semester and final marks apply.
- (b) The promotion system only applies to specific modules as indicated in the module contents starting on p.81. Students who obtain a semester for 70% or higher in a specific module can be promoted if the promotion system applies to the module. The module mark becomes the final mark for the module.
- (c) For the duration of the examinations, see the module contents starting on p.81.

- (d) The degree is awarded with distinction to a student who obtained a weighted average of 75% in the prescribed final modules and if the programme was completed in the prescribed minimum study years.

NAS8.2 – Evaluation for Departments of Architecture, Quantity Surveying and Construction Management, and Urban and Regional Planning

- (a) For most of the modules presented by the Department of Architecture, Urban and Regional Planning, Quantity Surveying and Construction Management evaluation of the student's academic progress will take place on a continuous basis by means of assignments, tests and/or design tasks as specified in the module guide. The acknowledgment of a year/semester mark obtained will be subject to satisfactory attendance at lectures, studio periods and seminars. A final mark which will be taken as the student's examination mark will be compiled from the marks obtained in the assessments mentioned above.
- (b) Modules presented by departments other than Architecture or Quantity Surveying/Construction Management will be subject to the evaluation procedure of those departments.
- (c) Students in the Department of Architecture, Quantity Surveying and Construction Management must meet the prescribed sub-minimum of 30% for all assignments and design task as specified in the module guides to pass a module.

NAS8.3

In addition to the requirements contained in General Regulation A28.2, a candidate has to comply with the additional faculty requirements:

To gain admission to the examination in a module in the Faculty of Natural and Agricultural Sciences, a module mark of at least 45 percent is required.

10. QUALIFICATIONS IN THE FACULTY

| 10.1 BACHELOR DEGREES AND DIPLOMAS | | MINIMUM PERIOD OF STUDY | NQF LEVEL | NUMBER OF LEARNING PROGRAMMES | ABBREVIATION | PAGE |
|---|--|-------------------------|-----------|-------------------------------|--|-------|
| DIPLOMA | | | | | | |
| 1 | Advanced Diploma in Sustainable Agriculture in Rural Development | 1,5 years | 7 | 1 | AdvDip (Sustainable Agriculture) (Rural Development) | 35 |
| ACCESS PROGRAMMES AND EXTENDED PROGRAMMES – South Campus first year of study | | | | | | |
| 1 | University Preparation Programme: Agricultural Sciences for BAgric | 1 year | 5 | 1 | UPP Agric | 36 |
| 2 | University Preparation Programme: Natural and Agricultural Sciences for BSc | 1 year | 5 | 1 | UPP Mathematics& Chemistry | 36 |
| 3 | Bachelor of Agriculture Extended | 4 years | 7 | 1 | BAgric | 37 |
| 4 | Bachelor of Bachelor of Science in Agriculture Extended Programme | 5 years | 8 | 1 | BSc (Agriculture) | 37 |
| 5 | Bachelor of Science Extended Programme (Mathematics and Chemistry) | 4 years | 7 | 1 | BSc | 38 |
| 6 | Bachelor of Science Extended Programme (Mathematics and Finances) | 4 years | 7 | 1 | BSc | 38 |
| BACHELOR'S DEGREES | | | | | | |
| 1 | Bachelor of Architecture | 3 years | 7 | 1 | BArch | 39 |
| 2 | Bachelor of Agriculture | 3 years | 7 | 7 | BAgric | 40–41 |
| 3 | Bachelor of Consumer Sciences | 4 years | 8 | 2 | BConsumer Science | 42 |
| 4 | Bachelor of Science | 3 years | 7 | 6 (61) | BSc | 43-56 |
| 5 | Bachelor of Science in Information Technology | 3 years | 7 | 6 | BSc (Information Technology) | 51 |
| 6 | Bachelor of Science majoring in Construction Management (Residential + Distance learning) | 3 years | 7 | 2 | BSc majoring in Construction Management | 48 |
| 7 | Bachelor of Science majoring in Quantity Surveying (Residential+ Distance learning) | 3 years | 7 | 2 | BSc majoring in Quantity Surveying | 48 |
| 8 | Bachelor of Science in Agriculture | 4 years | 8 | 4 (8) | BSc (Agriculture) | 57–62 |
| 9 | Bachelor of Science in Home Economics | 4 years | 8 | 1 | BSc (Home Economics) | 44 |

| 10.2 POSTGRADUATE DIPLOMAS, BACHELOR, HONOURS, MASTER'S AND DOCTORAL DEGREES | | MINIMUM PERIOD OF STUDY | NQF LEVEL | NUMBER OF LEARNING PROGRAMMES | ABBREVIATION | PAGE |
|--|---|-------------------------|-----------|-------------------------------|---|-------|
| POSTGRADUATE DIPLOMA | | | | | | |
| 1 | Advanced University Diploma in Disaster Management | 1 year | 8 | 1 | AdvUniDip (Disaster Management) | 63 |
| BACHELOR HONOURS DEGREES | | | | | | |
| 1 | Bachelor of Architecture Honours | 1 year | 8 | 1 | BArchHons | 63 |
| 2 | Bachelor of Agriculture Honours | 1 year | 8 | 3 | BAgricHons | 63 |
| 3 | Bachelor of Science Honours in Home Economics | 1 year | 8 | 1 | BScHons (Home Economics) | 64 |
| 4 | Bachelor of Science Honours | 1 year | 8 | 35 | BScHons | 65-71 |
| 5 | Bachelor of Science Honours majoring in Construction Management (Residential) | 1 year | 8 | 1 | BScHons majoring in Construction Management | 67 |
| 6 | Bachelor of Science Honours majoring in Quantity Surveying (Residential) | 1 year | 8 | 1 | BScHons majoring in Quantity Surveying | 67 |
| 7 | Bachelor of Science Honours majoring in Construction Management (Distance learning) | 2 years | 8 | 1 | BScHons majoring in Construction Management | 67 |
| 8 | Bachelor of Science Honours majoring in Quantity Surveying (Distance learning) | 2 years | 8 | 1 | BScHons majoring in Quantity Surveying | 67 |
| 9 | Bachelor of Spatial Planning Honours | 1 year | 8 | 1 | BSPHons | 64 |
| MASTER DEGREES | | | | | | |
| 1 | Master of Architecture | 2 years | 9 | 1 | MArch | 72 |
| 2 | Master of Architecture (Professional) | 1 year | 9 | 1 | MArch | 72 |
| 3 | Master of Agriculture | 2 years | 9 | 1 | MAgric | 72 |
| 4 | Master of Disaster Management | 2 years | 9+8 | 1 | MDM | 73 |
| 5 | Master of Environmental Management | 2 years | 9 | 1 | MEM | 73 |
| 6 | Master of Land and Property Development in Housing | 2 years | 9 | 1 | MLPD (Housing) | 76 |
| 7 | Master of Land and Property Development Management | 2 years | 9 | 1 | MLPM | 75 |
| 8 | Master of Sustainable Agriculture | 2 years | 9 | 1 | MSA | 74 |
| 9 | Master of Science | 2 years | 9 | 36 | MSc | 77-79 |
| 10 | Master of Science in Agriculture | 2 years | 9 | 8 | MSc (Agriculture) | 70 |
| 11 | Master of Science in Home Economics | 2 years | 9 | 1 | MSc (Home Economics) | 80 |
| 12 | Master of Science in Construction Management | 2 years | 9 | 1 | MSc (Construction Management) | 80 |
| 13 | Master of Science in Quantity Surveying | 2 years | 9 | 1 | MSc (Quantity Surveying) | 80 |
| 14 | Master of Urban and Regional Planning (Professional) | 1 year | 9 | 1 | MURP | 81 |
| 15 | Master of Urban and Regional Planning (Research) | 2 years | 9 | 1 | MURP | 82 |
| DOCTORAL DEGREES | | | | | | |
| 1 | Doctor of Architecture | 3 years | 10 | 1 | DArch | 83 |
| 2 | Doctor of Philosophy | 3 years | 10 | 57 | PhD | 83 |
| 3 | Doctor of Science | 3 years | 10 | 50 | DS | 84 |

11. LEARNING PROGRAMMES & MODULES REQUIRED

11.1 DIPLOMAS

11.1.1 ADVANCED DIPLOMA IN SUSTAINABLE AGRICULTURE IN RURAL DEVELOPMENT 50047(5203)

LEARNING PROGRAMMES FOR AGRICULTURE AND RURAL DEVELOPMENT

The main aim of the programme is to afford students, primarily agricultural extensionists, the opportunity to acquire the necessary skills and know-how to teach, demonstrate and facilitate sustainable agriculture and rural developmental (SARD) issues and practices to the benefit of the agricultural community. The exit level outcomes reflect an integration of the specific and critical outcomes. On achieving this qualification a graduate will, within the field of SARD and agricultural extension, be able to:

- (a) Manage rural structures and group dynamics.
- (b) Design strategies that will create understanding of production, marketing and value adding of agricultural produce by the community.
- (c) Apply sustainable plant production practices.
- (d) Apply sustainable animal production practices.
- (e) Conduct sound and effective communication skills and transfer of knowledge systems.

COMPULSORY YEAR 1 + 2

SARD1716/1726 Fundamentals of Rural Development
SAAM1716/1726 Fundamentals of Agriculture Economics
SACP1716/1726 Foundational theories in Plant Production

SALP1716/1726 Foundational Theories in Animal Production
SACT1716/1726 Basic communication skills for Sustainable Agriculture

11.2 LEARNING PROGRAMMES FOR ACCESS AND EXTENDED PROGRAMMES (SOUTH CAMPUS)

Candidates who do not comply with the Faculty of Natural and Agricultural Sciences entry requirements for main stream BSc studies can gain admission to the university through the University Preparation Programme (UPP) or the BSc Extended Programmes. The programme provides students with an opportunity to improve their skills and competencies with aim of gaining access to mainstream studies after successful completion of the first year. These programmes also

addresses, through a course in Skills and Competencies in Lifelong Learning, the student's wider needs with regards to quality of personal life, study and reading skills, self-assertiveness, problem solving, and other generic competencies. These students also attend an academic language course in English to improve their reading and writing skills for higher education purposes.

UNIVERSITY PREPARATION PROGRAMMES 40001, 50001(4002,5002)

| LEARNING PROGRAMMES FOR UNIVERSITY PREPARATION PROGRAMMES | | | | | | | |
|--|---|---|---|--|---|--|---------------------------|
| 11.2.1 NATURAL SCIENCES 40001(4002) (CHEMISTRY / MATHEMATICS) | | | | 11.2.2 AGRICULTURAL SCIENCES 50001(5002) (AGRICULTURAL SUBJECTS) | | | |
| YEAR | | Semester 1 | Semester 2 | | Semester 1 | Semester 2 | |
| 1 | Academic Modules Mathematics Chemistry Biology Computer Science Development Modules Academic language course Computer Literacy Life-long Learning – Natural Sciences | MATD1554 OR MATD1534 CHEM1412 + CHEM1532 BLGY1513 | MATD1564 MATD1544 CHEM1622 + CHEM1642 ONE OF BLGY1643 OR CSIS1564 | 1 | Agricultural Economics Biological principles in Agriculture Introduction to Animal Wildlife and Grassland Sciences Academic language skills course English or Afrikaans Computer Literacy Life-long Learning Mathematical Literacy in Agriculture | AGECE1514 AGR1514 EALN1508 or AGAN1508 CSIL1551 SCLL1508 MTDA1508 | AGECE1624 ANIG1624 |
| <p>After successful completion of ALL THE MODULES in the first year of the BSc Four-year Curriculum (Extended Programme) with an average of 60 % for Academic modules, the student changes to the first year main fields of interest modules of the learning programme of his/her choice on the main campus set out in the Faculty's Rule Book. Students must take note of the following requirements:</p> <ul style="list-style-type: none"> Students must pass all academic modules in the June examination to continue their studies in the second semester To register for CHEM1622 students must have passed CHEM1412 and CHEM1532 To register for CHEM1642 students must have passed CHEM1412 and MATD1554 or level 4 for NSC Mathematics. To register for MATD1564 students must have passed MATD1554. To register for MATD1534 students must have have a level 4 for NSC Mathematics. To register for MATD1544 students must have passed MATD1534 <p>Students who could not complete the first two years of study in three years will not be allowed for re-registration to the Faculty of Natural and Agricultural Sciences.</p> | | | | <p>After successful completion of ALL THE MODULES in the first year of the BSc Four-year Curriculum (Extended Programme) or the UPP AGRIC Sciences with an average of 55 % for the Academic modules, the student changes to the first year main fields of interest modules of the learning programme of his/her choice on the main campus set out in the Faculty's Rule Book. Students must take note of the following requirements:</p> <ul style="list-style-type: none"> Students must pass all academic modules in the June examination to continue their studies in the second semester <p>Students who could not complete the first two years of study in three years will not be allowed for re-registration to the Faculty of Natural and Agricultural Sciences.</p> | | | |
| 2 | <p>In their second year of study students have to register for CHEM1551, CHEM1561 and CSIL1521 as well as all the first year main fields of interest modules in the learning programme of choice as set out in the Faculty Rule Book.</p> <p>Students must take note of the following requirements:</p> <ul style="list-style-type: none"> To register for CHEM1551 students must have passed CHEM1622 + CHEM1642 as well as MATD1564 or MATD1534. To register for CHEM1561, students must have passed CHEM1551. The modules CHEM1412, CHEM1622, CHEM1532, CHEM1642, CHEM1551 and CHEM1561 must be passed to get recognition for CHEM1514 and CHEM1624/CHEM1644. BLGY1513, BLGY1643 will be recognised as mainstream modules in the following academic year. BLGY1513 and CSIQ1531 to get recognition for CSIL1511. (See BSc main fields of interest learning programmes). | | | 2 | <p>Follow the main fields of interest <u>first year</u> BAgric Learning Programme of choice as set forth in the Faculty Rule Book.</p> <ul style="list-style-type: none"> The modules AGECE1514, AGR1514, will be recognised as mainstream modules in the following academic year. CSIQ1531 must be passed to get recognition for CSIL1511. (See BSc main fields of interest learning programmes). | | |
| 3 | <p>Follow <u>second year</u> learning programme of choice in the Faculty Rule Book.</p> <p>Students must take note of the following requirement:</p> <ul style="list-style-type: none"> Students must have pass CHEM1551, CHEM1561 and CSIL1521 to be allowed to change to the programme code of current study. | | | 3 | <p>Follow <u>second year</u> BAgric Learning Programme of choice as set forth in the Faculty Rule Book.</p> | | |
| 4 | <p>Follow the <u>third year</u> learning programme of choice as set out in the Faculty Rule Book.</p> | | | 4 | <p>Follow the <u>third year</u> BAgric Learning Programme of choice as set forth in the Faculty Rule Book.</p> | | |

EXTENDED PROGRAMMES 50990, 50991 (4393)

| LEARNING PROGRAMMES FOR EXTENDED PROGRAMMES | | | | | | |
|--|--|-------------|---------------------|--|--|----------------------|
| 11.2.3 BSc AGRICULTURE FIVE-YEAR 50990 SOUTH CAMPUS | | | | 11.2.4 B AGRICULTURE FOUR YEAR 50991 SOUTH CAMPUS | | |
| Year | | Semester 1 | Semester 2 | | Semester 1 | Semester 2 |
| 1 | Mathematics | MATD1554 OR | MATD1564 | | Agricultural Economics | AGEC1514 |
| | Chemistry | MATD1534 | MATD1544 | | Biological principles in Agriculture | AGRI1514 |
| | Biology | CHEM1412 + | CHEM1622 + CHEM1642 | | Introduction to Animal Wildlife and Grassland Sciences | ANIG1624 |
| | Introduction to Programming | CHEM1532 | CSIS1564 | | | |
| | Academic language course | BLGY1513 | | | | |
| | Life-long Learning – Natural Sciences | EALN1508 | | | Academic language skills course English or Afrikaans | EALN1508 or AGAN1508 |
| | Computer Literacy | SCNS1508 | | | Computer Literacy | CSIL1551 |
| | | CSIL1551 | | | Life-long Learning | SCLL1408 |
| | | | | | Mathematical Literacy in Agriculture | MTDA1508 |
| After successful completion of ALL THE MODULES in the first year of the BSc Four-year Curriculum (Extended Programme) with an average of 60 % for Academic modules, the student changes to the first year main fields of interest modules of the learning programme of his/her choice on the main campus set out in the Faculty's Rule Book. <ul style="list-style-type: none">Students must pass all academic modules in the June examination to continue their studies in the second semesterTo register for CHEM1622 students must have passed CHEM1412 and CHEM1532To register for CHEM1642 students must have passed CHEM1412 and MATD1554 or level 4 for NSC Mathematics.To register for MATD1564 students must have passed MATD1554.To register for MATD1534 students must have have a level 4 for NSC Mathematics.To register for MATD1544 students must have passed MATD1534 Students who could not complete the first two years of study in three years will not be allowed for re-registration to the Faculty of Natural and Agricultural Sciences. | | | | After successful completion of ALL THE MODULES in the <u>first year</u> of the BSc Four-year Curriculum (Extended Programme) or the UPP AGRIC Sciences with an average of 55 % for the Academic modules, the student changes to the first year main fields of interest modules of the learning programme of his/her choice on the main campus set out in the Faculty's Rule Book. The student register for the 50901-50907 learning programme code. <ul style="list-style-type: none">Students must pass all academic modules in the June examination to continue their studies in the second semester Students who could not complete the first two years of study in three years will not be allowed for re-registration to the Faculty of Natural and Agricultural Sciences. | | |
| 2 | In their second year of study students have to register for CHEM1551, CHEM1561 and CSIL1521 as well as all the <u>first year</u> main fields of interest modules in the learning programme of choice as set out in the Faculty Rule Book. Students must take note of the following requirements: <ul style="list-style-type: none">To register for CHEM1551 students must have passed CHEM1622 + CHEM1642 as well as MATD1564.To register for CHEM1561, students must have passed CHEM1551.The modules CHEM1412, CHEM1622, CHEM1532, CHEM1642, CHEM1551 and CHEM1561 must be passed to get recognition for CHEM1514 and CHEM1624/CHEM1644.BLGY1513 must be passed to get recognition for BLGY4153 and CSIQ1531 to get recognition for CSIL1511. (See BSc main fields of interest learning programmes). | | | 2 | Follow the main fields of interest <u>first year</u> BAgric Learning Programme of choice as set forth in the Faculty Rule Book. <ul style="list-style-type: none">The modules AGECE1514, AGRI1514, will be recognised as mainstream modules in the following academic year.CSIQ1531 must be passed to get recognition for CSIL1511. (See BSc main fields of interest learning programmes). | |
| 3 | Follow main fields of interest <u>second year</u> BSc learning programme of choice as set out in the Faculty Rule Book. Students must take note of the following requirement: <ul style="list-style-type: none">Students must have passed CHEM1551, CHEM1561 and CSIL1521 to be allowed to change to the programme code of current study. | | | Follow the main fields of interest <u>second year</u> BAgric learning programme of choice as set forth in the Faculty Rule Book. | | |
| 4 | Follow main fields of interest <u>third year</u> BSc learning programme of choice as set out in the Faculty Rule Book. | | | Follow the main fields of interest <u>third year</u> BAgric learning programme of choice as set forth in the Faculty Rule Book. | | |

| 11.2.5 BSc FOUR-YEAR 40990 (MATHEMATICS AND CHEMISTRY) | | | | 11.2.6 BSc FOUR-YEAR 40991 (MATHEMATICS AND FINANCES) (SOUTH CAMPUS) (Note: This programme is only presented in English) | | | |
|--|--|--|--|---|--|--|---|
| Year | | Semester 1 | Semester 2 | | | Semester 1 | Semester 2 |
| 1 | Mathematics Chemistry Biology Introduction to Programming | MATD1554 OR MATD1534 CHEM1412 + CHEM1532 BLGY1513 | MATD1564 MATD1544 CHEM1622 + CHEM1642 ONE OF BLGY1643 CSIS1564 | 1 | Mathematics Introduction to Programming Accounting or Introduction to human resource management Introduction to individual differences Economics | MATD1554 OR MATD1534 Two of the following: EACC1614 OR EFHR1515 OR EFEC2614 | MATD1564 OR MATD1544 CSIS1564 Two of the following: EACC1624 OR EFIO1525 EFEC2624 |
| | Academic language course Life-long Learning – Natural Sciences Computer Literacy | EALN1508 SCNS1508 CSIL1551 | | | Academic language course Life-long Learning – Natural Sciences Computer Literacy | EALN1508 SCNS1508 CSIL1551 | |
| <p>After successful completion of ALL THE MODULES in the first year of the BSc Four-year Curriculum (Extended Programme) with an average of 60 % for Academic modules, the student changes to the first year main fields of interest modules of the learning programme of his/her choice on the main campus set out in the Faculty's Rule Book. Students must take note of the following requirements:</p> <ul style="list-style-type: none"> Students must pass all two academic modules in the June examination to continue their studies in the second semester To register for CHEM1622 students must have passed CHEM1412 and CHEM1532 To register for CHEM1642 students must have passed CHEM1412 and MATD1554 or level 4 for NSC Mathematics. To register for MATD1564 students must have passed MATD1554. To register for MATD1534 students must have have a level 4 for NSC Mathematics. To register for MATD1544 students must have passed MATD1534 <p>Students who could not complete the first two years of study in three years will not be allowed for re-registration to the Faculty of Natural and Agricultural Sciences.</p> | | | | <p>After successful completion of ALLTHE MODULES in the first year of the BSc Four-year Curriculum (Extended Programme) with an average of 60 % for Academic modules, the student changes to the first year main fields of interest modules of the learning programme of his/her choice on the main campus set out in the Faculty's Rule Book. Students must take note of the following requirements:</p> <ul style="list-style-type: none"> To register for MATD1564 students must have passed MATD1554. To register for MATD1534 students must have have a level 4 for NSC Mathematics. To register for MATD1544 students must have passed MATD1534 <p>Students who could not complete the first two years of study in three years will not be allowed for re-registration to the Faculty of Natural and Agricultural Sciences.</p> | | | |
| 2 | <p>In their second year of study students have to register for CHEM1551, CHEM1561 and CSIL1521 as well as all the first year main fields of interest modules in the learning programme of choice as set out in the Faculty Rule Book.</p> <p>Students must take note of the following requirements:</p> <ul style="list-style-type: none"> To register for CHEM1551 students must have passed CHEM1622 + CHEM1642 as well as MATD1564. To register for CHEM1561, students must have passed CHEM1551. The modules CHEM1412, CHEM1622, CHEM1532, CHEM1642, CHEM1551 and CHEM1561 must be passed to get recognition for CHEM1514 and CHEM1624/CHEM1644. BLGY1513 must be passed to get recognition for BLGY1513 (main campus) and CSIL1551 to get recognition for CSIL1511. (See BSc main fields of interest learning programmes). | | | 2 | <p>In their second year of study students have to register for CSIL1521 as well as all the <u>first year</u> main fields of interest modules in the learning programme of choice as set out in the Faculty Rule Book.</p> | | |
| 3 | <p>Follow <u>second year</u> learning programme of choice in the Faculty Rule Book.</p> <p>Students must take note of the following requirement:</p> <ul style="list-style-type: none"> Students must have pass CHEM1551, CHEM1561 and CSIL1521 to be allowed to change to the programme code of current study. | | | 3 | <p>Follow main fields of interest <u>second year</u> learning programme of choice in the Faculty Rule Book.</p> | | |
| 4 | <p>Follow the <u>third year</u> learning programme of choice as set out in the Faculty Rule Book.</p> | | | 4 | <p>Follow main fields of interest <u>third year</u> learning programme of choice in the Faculty Rule Book.</p> | | |

11.3 LEARNING PROGRAMMES FOR BACHELOR DEGREES FOR DEGREES (NQF LEVEL 7 & 8)

11.3.1 BACHELOR OF ARCHITECTURE 40114(4310)

The Bachelor of Architecture involves full-time education that extends over six semesters and involves lectures, projects, and continuous evaluation.

The purpose of this programme is to educate candidates who may register in the appropriate category for which they qualify with the South African Council for the Architectural Profession in terms of the provisions of the Architectural Profession Act 44 of 2000. The degree BArch provides access to the BArchHons degree.

Students are strongly advised to work in an architect's office or other approved similar institution during holidays in order to gain practical experience.

The evaluations and examinations for the degree BArch are recognised by the minister concerned in terms of the provisions of the Architectural Profession Act (Act 44 of 2000). Training experience after completion of the BArch degree will be controlled by the conditions of the South African Council for the Architectural Profession. The registrar of this Council will provide information in this regard.

| YEAR | FIRST | FIRST |
|----------------------------|--|----------------------|
| SEMESTER | FIRST | SECOND |
| COMPULSORY YEAR | DESN1500 Design CONS1506 Building Science HARC1504 History of Architecture PTEC1504 Presentation Techniques | |
| COMPULSORY SEMESTER | TRIG1512 Trigonometrical Drawing | PHOT1522 Photography |
| | UFS101 *EALN1508 or AGAN1508 | |
| YEAR | SECOND | SECOND |
| SEMESTER | FIRST | SECOND |
| | DESN2600 Design CONS2606 Building Sciences HARC2604 History of the Environment CDRA2604 Computer Drafting CSCR2604 Construction Science TARC2604 Theory of Architecture | |
| YEAR | THIRD | THIRD |
| SEMESTER | FIRST | SECOND |
| | DESN3700 Design CONS3706 Building Science HARC3704 History of the Environment TARC3704 Theory of Architecture CCMR3704 Building Contracts Law CSCR3704 Construction Science | |

11.3.2 BACHELOR OF AGRICULTURE

11.3.2.1 MANAGEMENT SPECIALISATION FIELDS OF INTEREST 50101-50106 (5311-5318)

LEARNING PROGRAMMES FOR MANAGEMENT SPECIALISATION

The objective of the degree and different learning programmes is to train students to apply agricultural knowledge practically on farm level as well as in agriculturally-related organisations. The BAgri qualification will allow persons to apply their knowledge in the fields of resource utilisation, agricultural production, processing, management and communication.

Learning programmes in this FIELD OF INTEREST offer six options. These learning programmes will lead to one of the following qualifications: BAgri Irrigation Management, Animal Production Management, Mixed-farming Management, Crop Production Management,

Agricultural Management or Wildlife Management. The programmes consist of the combination of two majors, e.g. combined with management subjects. The table below indicates the combinations for the different qualifications. Each student includes all the compulsory modules (row C1) from the prescribed disciplines for all three study years. Students must select sufficient other modules (other science subjects as supportive electives) from the compulsory row of any other discipline or from their own electives (E) to obtain a total of at least 120 credits for each of the first and the second year of study.

| DISCIPLINE | IRRIGATION MANAGEMENT | ANIMAL PRODUCTION MANAGEMENT | MIXED FARMING MANAGEMENT | WILD LIFE MANAGEMENT | CROP PRODUCTION MANAGEMENT | AGRICULTURAL MANAGEMENT | IRRIGATION MANAGEMENT | ANIMAL PRODUCTION MANAGEMENT | MIXED FARMING MANAGEMENT | WILD LIFE MANAGEMENT | CROP PRODUCTION MANAGEMENT | AGRICULTURAL MANAGEMENT |
|------------------|---|---|---|--|---|---|---|---|---|---|---|---|
| OLD CODE | 5311 | 5312 | 5313 | 5317 | 5314 | 5316 | 5311 | 5312 | 5313 | 5317 | 5314 | 5316 |
| NEW CODE | 50104 | 50102 | 50105 | 50106 | 50103 | 50101 | 50104 | 50102 | 50105 | 50106 | 50103 | 50101 |
| EXT CODE | 50904 | 50902 | 50905 | 50906 | 50903 | 50901 | 50904 | 50902 | 50905 | 50906 | 50903 | 50901 |
| YEAR | FIRST | | | | | | FIRST | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C1 | AGRI1514 AGRI1534 AGRI1554 AGEC1514 | AGRI1514 AGRI1534 AGRI1554 AGEC1514 | AGRI1514 AGRI1534 AGRI1554 AGEC1514 | AGRI1514 AGRI1534 AGRI1554 AGEC1514 | AGRI1514 AGRI1534 AGRI1554 AGEC1514 | AGRI1514 AGRI1534 AGRI1554 AGEC1514 | AGRI1624 AGRI1664 SCCS1624 ANIG1624 | AGRI1624 AGRI1664 SCCS1624 ANIG1624 | AGRI1624 AGRI1664 SCCS1624 ANIG1624 | AGRI1624 AGRI1664 SCCS1624 ANIG1624 | AGRI1624 AGRI1664 SCCS1624 ANIG1624 | AGRI1624 AGRI1664 SCCS1624 ANIG1624 |
| REQUIRED | CSIL1511 UFS101 *if NBT < 65% *EALN1508 or AGAN1508 | | | | | | CSIL1521 | | | | | |
| YEAR | SECOND | | | | | | SECOND | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| C2 | CROP2614 SOIL2614 AGEC2614 CLIM2614 | SOIL2614 AGEC2614 ANIG2614 GRAS2614 | CROP2614 AGEC2614 ANIG2614 ONE OF SOIL2614 CLIM2614 GRAS2614 | SOIL2614 AGEC2614 ANIG2614 GRAS2614 | CROP2614 SOIL2614 AGEC2614 CLIM2614 | AGEC1534 AGEC2614 ANIG2614 CROP2614 | CROP2624 SOIL2624 AGEC2624 AGEG2624 | AGEC1624 AGEC2624 ANIG2624 ANIG2624 | AGEC1624 CROP2624 ANIG2624 ONE OF CLIM2624 SOIL2624 AGEG2624 | SOIL2624 AGEC1624 AGEC2624 ANIG2624 | CROP2624 SOIL2624 AGEC1624 ONE OF CLIM2624 AGEG2624 | AGEC1624 AGEC2624 CROP2624 ANIG2624 |
| YEAR | THIRD | | | | | | THIRD | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| C3 | CROP3714 SOIL3714 AGEG3714 ONE OF AGMA3714 AGMA3734 | ANIG3714 ANIG3734 GRAS3714 ONE OF AGMA3714 AGMA3734 | CROP3714 ONE OF ANIG3714 ANIG3734 ONE OF SOIL3714 GRAS3714 ONE OF AGMA3714 AGMA3734 | GRAS3714 ANIG3714 AGMA3714 AGMA3734 | CROP3714 SOIL3714 CLIM3714 ONE OF AGMA3714 AGMA3734 | AGMA3714 AGMA3734 CROP3714 ONE OF ANIG3714 ANIG3734 | CROP3724 SOIL3724 AGEG3724 AGMA3762 ONE OF AGMA3724 AGMA3744 | ANIG3724 ANIG3744 AGMA3762 GRAS3724 ONE OF AGMA3724 AGMA3744 | CROP3724 AGMA3762 ONE OF AGMA3724 ONE OF ANIG3724 ANIG3744 ONE OF SOIL3724 GRAS3724 | GRAS3724 GRAS3764 AGMA3762 ONE OF AGMA3724 AGMA3744 | CROP3724 SOIL3724 CLIM3724 AGMA3762 ONE OF AGMA3724 AGMA3744 | AGMA3724 AGMA3744 AGMA3762 ONE OF CROP3724 ANIG3724 ANIG3744 |

11.3.2.2 AGRICULTURAL ECONOMICS 50111(5318)

LEARNING PROGRAMMES FOR AGRICULTURAL ECONOMICS

The objective of the degree is to train students to apply agricultural knowledge practically on the farm level as well as in agriculturally-related organisations. The BAgric qualification will allow persons to apply their knowledge in the fields of resource utilisation, agricultural production, processing, management and communication.

Learning programmes in this FIELD OF INTEREST offer ONE option. Each student includes all the compulsory modules (row C1) from the prescribed disciplines for all three study years. Students must select sufficient other modules (other science subjects as supportive electives) from the compulsory row of any other discipline or from their own electives (E) to obtain a total of at least 120 credits for each year of study.

| YEAR | FIRST | FIRST | | SECOND | SECOND | | THIRD | THIRD |
|--------------------------|--|--|--|--|----------------------------------|--|--|--|
| SEMESTER | FIRST | SECOND | | FIRST | SECOND | | FIRST | SECOND |
| COMPULSORY C1 | AGEC1534 LMER1514 EACC1614 AGEC1514 | AGRI1624 EBUS1624 LMER2624 AGEC1624 | | AGEC2614 EBUS1614 | AGEC2624 AGEG2624 | | AGEC3714 AGEC3734 AGMA3714 | AGEC3724 AGEC3744 AGMA3724 AGMA3762 |
| ELECTIVES | | | | ETXA2608 CROP2614 SOIL2614 ANIG2614 GRAS2614 | CROP2624 ANIG2624 SOIL2624 | | CROP3714 ANIG3714 SOIL3714 GRAS3714 | CROP3724 ANIG3724 SOIL3724 GRAS3724 |
| REQUIRED | CSIL1511 UFS101 | CSIL1521 | | | | | | |
| *if NBT < 65% | *EALN1508 or AGAN1508 | | | | | | | |

11.3.3 BACHELOR OF CONSUMER SCIENCES 40123 (4351, 4352)

LEARNING PROGRAMMES FOR CONSUMER SCIENCE

Consumer science is a study of the need of man regarding housing, clothing and food and the management of resources to satisfy these needs. After completion of this programme, the B Consumer Science student will be capable of following a career as a Consumer Scientist, e.g. consumer consultant, designer, buyer, marketer, or quality control inspector of consumer products. The student should also be capable of advising consumers on the management of time, energy and other resources. The major subjects are Foods, Consumer Science and Textiles. **Learning**

programmes in the CONSUMER SCIENCE FIELD OF INTEREST offer THREE options of which two is a three-year exit at level outcome. Each student includes all the compulsory modules (row C1) from the prescribed disciplines for all three study years and selects sufficient other modules (other science subjects as supportive electives) from the compulsory row to obtain a total of at least 120 credits for each year of study.

| | GENERAL 40123 (4351) | | | | | | FOOD 40123 (4352) | | | | | |
|-------------------|----------------------|----------|----------|----------|---------------|---------------|-------------------|----------|----------|----------|----------|----------|
| YEAR | FIRST | FIRST | SECOND | SECOND | THIRD | THIRD | FIRST | FIRST | SECOND | SECOND | THIRD | THIRD |
| SEMESTER | FIRST | SECOND | FIRST | SECOND | FIRST | SECOND | FIRST | SECOND | FIRST | SECOND | FIRST | SECOND |
| COMPULSORY | CNFD1532 | CNCS1622 | CNFD2614 | CNFD2624 | CNST3712 | CNFD3744 | CNFD1532 | CNCS1622 | NUTE2614 | NUTE2624 | FSME3714 | FSME3724 |
| C1 | CNST1534 | CNST1644 | CNST2614 | CNCS2624 | CNCS3732 | CNST3722 | NUTE1514 | NUTE1524 | CNFD2614 | CNFD2624 | CNCS3732 | CNFD3744 |
| | CNCS1634 | CNCS1624 | MCBH2614 | CNCS2622 | CNFD3713 | CNCS3724 | CNCS1634 | EBUS1624 | MCBH2614 | CNCS2622 | CNFD3713 | CNCS3724 |
| | EBUS1614 | EBUS1624 | FSCS2614 | MCBH2624 | CNFD3732 | | EBUS1614 | EBMA2624 | FSCS2614 | MCBH2624 | CNFD3732 | ESBN2724 |
| | | | | | NUTE3714 | | | | | | NUTE3714 | |
| ELECTIVES | | | | | ONE OF | ONE OF | | | | | | |
| E | | | | | CNST3734 | CNCS3744 | | | | | | |
| | | | | | CNST3754 | EBMA2624 | | | | | | |
| | | | | | EBUS2714 | ONE OF | | | | | | |
| | | | | | | CNST3744 | | | | | | |
| | | | | | | ESBN2724 | | | | | | |
| REQUIRED | CSIL1511 | CSIL1521 | | | | | CSIL1511 | CSIL1521 | | | | |
| | UFS101 | | | | | | UFS101 | | | | | |
| | *EALN1508 or | | | | | | *EALN1508 or | | | | | |
| *if NBT < 65% | AGAN1508 | | | | | | AGAN1508 | | | | | |
| YEAR | FOURTH | | | | | | FOURTH | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY | CNCS4809 | | | | | | | | | | | |
| C1 | | | | | | | | | | | | |
| ELECTIVES | CNST4814 | | | | | | CNST4824 | | | | | |
| E | CNST4834 | | | | | | CNST4844 | | | | | |
| | CNST4853 | | | | | | CNST4864 | | | | | |
| | CNCS4834 | | | | | | CNCS4824 | | | | | |
| | CNFD4808 | | | | | | CNCS4844 | | | | | |
| | NUTE6808 | | | | | | | | | | | |
| | CNCS4814 | | | | | | | | | | | |

11.4 LEARNING PROGRAMMES FOR BACHELOR OF SCIENCE DEGREES (NQF LEVEL 7 & 8)

11.4.1 BACHELOR OF SCIENCE

11.4.1.1 BACHELOR OF SCIENCE 4xx00

LEARNING PROGRAMMES FOR BACHELOR OF SCIENCE GENERAL

Each student includes 120 credits per year for three years. In planning their degree they need to consider the prerequisite for the second-year and third-year modules. They can only take modules that do not clash on the official timetable. This degree makes provision for one major with at least 60 NQF Level 7 credits in that major and a combination of different related modules for at least 60 credits also at NQF Level 7.

| YEAR | FIRST | | | SECOND | | | THIRD | |
|----------------------------------|--|---|----|---|---|----|--|---|
| SEMESTER | FIRST | SECOND | | FIRST | SECOND | | FIRST | SECOND |
| COMPULSORY C1 | 60 CREDITS OF BLGY1513 CHEM1514 PHYS1514 OR PHYS1534 MATM1614 OR MATM1534 GLGY1614 | 60 CREDITS OF BLGY1623 OR BLGY1643 OR BLGY1663 OR BLGY1683 CHEM1624 OR CHEM1644 PHYS1624 OR PHYS1644 MATM1624 OR MATM1544 GLGY1624 | C2 | 60 CREDITS OF BOCB2616 CHEM2614+CHEM2632 ZLGY2616 PHYS2614+ PHYS2632 GENE2616 MCBP2616 BTNY2616+BTNY2602 MATM2614 MATA2634 MATM2654 ENTO2616 FSCI2612+FSCC2612 | 60 CREDITS OF BOCE2626 CHEM2624+CHEM2642 ZLGY2626 PHYS2624+PHYS2642 GENE2626 MCBP2626 BTNY2626 MATM2624 MATA2644 MATM2664 ENTO2626 FSCC2622+FSCS2624 | C3 | 60 CREDITS OF BOCM3714+BOCE3714 CHEM3714+CHEM3734 ZLGY3714+ZLGY3734 PHYS3714+PHYS3732+PHYS3752 FORS3734+GENE3734 MCBG3714 BTNY3714+BTNY3702 BTNY3734+BTNY3754 ENTO3714+ENTO3734 FSCA3714+FSCI3714 | 60 CREDITS OF BOCP3724+BOCS3724 CHEM3724+CHEM3744 ZLGY3724+ZLGY3744 PHYS3724+PHYS3742+PHYS3762 GENE3724+GENE3744 MCBM3724+MCBP3724 or MCB3724 BTNY3724+BTNY3744 ENTO3724+ENTO3744 FSCP3724+FSCB3724 |
| REQUIRED *if NBT < 65% | CSIL1511 UFS101 EALN1508 OR AGAN1508 | CSIL1521 | | | | | | |

11.4.1.2 BACHELOR OF SCIENCE MAJORING IN ACTUARIAL SCIENCE 41000 (4336)

LEARNING PROGRAMMES IN ACTUARIAL SCIENCES

Students need to include all the compulsory modules for each year.

| YEAR | FIRST | | | SECOND | | | THIRD | |
|----------------------------------|--|--|----|--|--|----|--|----------------------|
| SEMESTER | FIRST | SECOND | | FIRST | SECOND | | FIRST | SECOND |
| COMPULSORY C1 | MATM1614 STSM1614 ACSF1513 EECF1614 ACSG1614 | MATM1624 STSM1624 EECF1624 ACSF1523 CSIQ1682 | C2 | ACSF2716 MATM2614 STSM2616 EMIC2714 | ACSF2746 MATM2644 STSM2626 EMAC2724 MATA2664 | C3 | ACSL3706 ACSF3706 ACSS3716 STSM3714 STSM3734 | STSM3724 STSM3744 |
| ELECTIVE | | | | MATM2654 | | | | |
| REQUIRED *if NBT < 65% | CSIL1511 UFS101 *EALN1508 or AGAN1508 | CSIL1521 | | | | | | |

11.4.1.3 BACHELOR OF SCIENCE MAJORING IN AGRICULTURAL ECONOMICS 41100

LEARNING PROGRAMMES FOR AGRICULTURAL ECONOMICS

The objective is to train scientists who, through research and practically orientated development, can promote a scientific subject in particular or agricultural science in general. After acquiring the BScAgric qualification, the person will have the following skills, e.g. problem identification and aim formulation, collecting and verification of data, systematisation and interpretation of data, effective communication of information and making recommendations.

the compulsory modules (row C1) from the prescribed disciplines for all three study years. Students must select sufficient other modules (other science subjects as supportive electives) from the compulsory row of any other discipline or from their own electives (E) to obtain at least 120 credits for each year of study.

Learning programmes in this FIELD OF INTEREST offer ONE option. Each student includes all

| YEAR | FIRST | | | SECOND | | | THIRD | |
|------------------|--|--|----|--|--|----|--|--|
| SEMESTER | FIRST | SECOND | | FIRST | SECOND | | FIRST | SECOND |
| COMPULSORY C1 | MATM1534 EBCS1514 BLGY1513 AGEC1514 | AGEC1624 MATM1544 STSA1624 | C2 | AGEC2614 EECF1614 STSA2616 | AGEC2624 STSA2626 CSIQ1682 EECF1624 | C3 | AGEC3714 AGEC3734 STSA3716 | AGEC3724 AGEC3744 AGEC3721 STSA3726 |
| ELECTIVE | | ONE OF SCCS1624 ANIG1624 BLGY1643 | | ONE OF CROP2614 SOIL2614 ANIG2614 GRAS2614 | ONE OF CROP2624 ANIG2624 SOIL2624 | | ONE OF CROP3714 ANIG3714 ANIG3734 SOIL3714 GRAS3714 | ONE OF CROP3724 ANIG3724 SOIL3724 GRAS3724 |
| REQUIRED | CSIL1511 UFS101 | CSIL1521 | | | | | | |
| *if NBT < 65% | *EALN1508 or AGAN1508 | | | | | | | |

11.4.1.4 BACHELOR OF SCIENCE IN HOME ECONOMICS 42301 (4354)

LEARNING PROGRAMMES FOR CONSUMER SCIENCE

After completion of the BSc Consumer Science programme the student will be capable to follow a career in the food industry. The major subjects are Foods and Food Science. **Learning programmes in the CONSUMER SCIENCE FIELD OF INTEREST offer one option**, that takes four years and exits at at NQF Level 8. Each student includes all the compulsory modules (row C1) from the

prescribed disciplines for all three study years and select sufficient other modules (other science subjects as supportive electives) from the compulsory row to obtain a total of at least 120 credits for each year of study.

| YEAR | FIRST | FIRST | SECOND | SECOND | THIRD | THIRD | FOURTH | FOURTH |
|------------------|--|--|--|--|--|--|--|----------------------|
| SEMESTER | FIRST | SECOND | FIRST | SECOND | FIRST | SECOND | FIRST | SECOND |
| COMPULSORY C1 | BLGY1513 CHEM1514 PHYS1534 CNFD1532 | BLGY1643 BLGY1683 CHEM1644 STSB1624 CSCS1622 | BOCH2614 MCBP2616 CNFD2614 FSCI2612 FSCC2612 | EBMA2624 CNFD2624 FSCS2624 FSCC2622 | CNFD3713 CNFD3732 NUTE3714 FSCA3714 CNCS3732 | CNFD3744 FSCP3724 CSCS3724 FSCB3724 | CSCS4809 R Select 76 credits from CSCS4814 CNFD4808 NUTE6808 FSCP4814 | CSCS4824 FSCD4826 |
| REQUIRED | CSIL1511 UFS101 | CSIL1521 | | | | | | |
| *if NBT < 65% | *EALN1508 or AGAN1508 | | | | | | | |

11.4.1.5 BACHELOR OF SCIENCE MAJORING IN BIOLOGICAL SCIENCES

BIOLOGICAL SCIENCES FIELDS OF INTEREST 1: 41920, 41927, 41931, 41939, 41949, 42027, 42031, 42039, 42049, 42731, 42739, 42749, 43139, 43149, 43949, 41929, 41946, 41976 (4306, 4302, 4304, 4307, 4305, 4503)

| LEARNING PROGRAMMES BIOLOGICAL SCIENCES FIELDS OF INTEREST 1 | | | | | | | | | | | | |
|--|--|---|---|---|---|---|---|---|---|--|--|--|
| Learning programmes in the BIOLOGICAL FIELD OF INTEREST 1 offer 15 options with a combination of any two of the six disciplines. Learning programmes consist of the combination of any two majors, e.g. Biochemistry and Microbiology, Biochemistry and Genetics, Biochemistry and Botany, Biochemistry and Entomology, Biochemistry and Zoology, Microbiology and Genetics, Microbiology and Botany, Microbiology and Entomology or Microbiology and Zoology. Students SELECT TWO DISCIPLINES and include all the | | | | | | | compulsory modules in row (C1, C2, and C3) of each of the selected disciplines for all three study years. Students need to SELECT enough modules per semester from the compulsory row (C1, C2, and C3) of any other discipline or from the elective row (E) for their selected disciplines to obtain at least 120 credits for each study year. Students could also combine one of the six disciplines with food science(29), Statistics(46) and Physiology(76). | | | | | |
| DISCIPLINE | BIOCHEMISTRY | MICROBIOLOGY | GENETICS | BOTANY | ENTOMOLOGY | ZOOLOGY | BIOCHEMISTRY | MICROBIOLOGY | GENETICS | BOTANY | ENTOMOLOGY | ZOOLOGY |
| OLD CODE | 41929, 41946, 41976 | 4305 | 4307 | 4302 | 4304 | 4303 | 4306 | 4305 | 4307 | 4302 | 4304 | 4303 |
| DISCIPLINE CODE | 19 | 39 | 31 | 20 | 27 | 49 | 19 | 39 | 31 | 20 | 27 | 49 |
| YEAR | FIRST | | | | | | FIRST | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C1 | BLGY1513 CHEM1514 PHYS1534 MATM1614 OR MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1614 OR MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1614 OR MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1614 OR MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1614 OR MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1614 OR MATM1534 | BLGY1623 BLGY1643 BLGY1663 BLGY1683 STSB1624 CHEM1644 OR CHEM1624 | BLGY1623 BLGY1643 BLGY1663 BLGY1683 STSB1624 CHEM1644 OR CHEM1624 | BLGY1623 BLGY1643 BLGY1663 BLGY1683 STSB1624 CHEM1644 OR CHEM1624 | BLGY1623 BLGY1643 BLGY1663 BLGY1683 STSB1624 CHEM1644 | BLGY1623 BLGY1643 BLGY1663 BLGY1683 STSB1624 CHEM1644 | BLGY1623 BLGY1643 BLGY1663 BLGY1683 STSB1624 CHEM1644 |
| REQUIRED | CSIL1511 UFS101 *EALN1508 OR AGAN1508 | CSIL1511 UFS101 *EALN1508 OR AGAN1508 | CSIL1511 UFS101 *EALN1508 OR AGAN1508 | CSIL1511 UFS101 *EALN1508 OR AGAN1508 | CSIL1511 UFS101 *EALN1508 OR AGAN1508 | CSIL1511 UFS101 *EALN1508 OR AGAN1508 | CSIL1521 | CSIL1521 | CSIL1521 | CSIL1521 | CSIL1521 | CSIL1521 |
| *if NBT < 65% | | | | | | | | | | | | |
| YEAR | SECOND | | | | | | SECOND | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C2 | BOCB2616 | MCBP2616 | GENE2616 | BTNY2616 BTNY2602 | ENTO2616 | ZLGY2616 | BOCE2626 | MCBE2626 | GENE2626 | BTNY2626 | ENTO2626 | ZLGY2626 |
| C2 | | BOCB2616 | | | | | | BOCE2626 | | | | |
| ELECTIVES | CHEM2614 CHEM2632 PHBG2616 STSA2616 FSCI2612 FSCC2612 MATM2614 | CHEM2614 CHEM2632 STSA2616 FSCI2612 FSCC2612 | PHBG2616 | | CROP2614 PLTB2613 | | CHEM2624 CHEM2642 PHBG2626 FSCC2622 + FSCS2624 STSA2626 MATM2624 | IQMQ2622 CHEM2624 CHEM2642 FSCC2622 + FSCS2624 STSA2626 MATM2624 | PHBG2626 | | CROP2624 CROP3724 PPLG3724 PLTB2623 | |
| YEAR | THIRD | | | | | | THIRD | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C3 | BOCM3714 BOCE3714 | MCBG3714 MCBP3714 | GENE3714 GENE3734 | BTNY3702 BTNY3714 ONE OF BTNY3734 BTNY3754 | ENTO3714 + ENTO3734 OR ENTO3754 | ZLGY3714 ZLGY3734 | BOCP3724 BOCS3724 | MCBM3724 ONE OF MCBP3714 MCBB3724 FSCB3724 | GENE3724 GENE3744 | BTNY3724 BTNY3744 | ENTO3724+ ENTO3744 | ZLGY3724 ZLGY3744 |
| C3 | | BOCM3714 | | | | | | | | | | |
| ELECTIVES | PHBG3716 PHBN3712 STSA3732 STSA3716 FSCA3714 FSCI3714 | STSA3716 FSCA3714 FSCC3714 | HMBG3714 HMBG3734 PHBG3716 PHBN3712 | | CROP3714 PPLG3714 PLTB3714 | | FSCP3724 + FSCB3724 STSA3742 STSA3726 PHBG3726 PHBE3722 | FSCP3724 STSA3742 MCBP3724 MCBB3724 FSCB3724 | HMBG3724 HMBG3744 PHBG3726 PHBE3721 FORS3744 | | CROP3724 PPLG4824 PLTB4824 | |

BIOLOGICAL SCIENCES FIELDS OF INTEREST 2: 43118, 43161, 43130 (4376, 4377)

LEARNING PROGRAMMES IN BIOLOGICAL SCIENCES FIELDS OF INTEREST 2

Learning programmes in the BIOLOGICAL SCIENCES FIELDS OF INTEREST 2 offer 4 options with a Behavioural Genetics (Genetics and Psychology), Human Molecular Biology, Forensics Sciences or Genetics & Physiology. Students **select one of the options** and include all the compulsory modules in row (C1, C2, and C3) of each of the selected disciplines for all three study years. Students

need to SELECT enough elective modules per semester from the compulsory row (C1, C2, and C3) of any other discipline or from the elective row (E) for their selected disciplines to obtain at least 120 credits for each study year.

| DISCIPLINE | BEHAVIOURAL GENETICS | HUMAN MOLECULAR BIOLOGY | FORENSIC SCIENCES | GENETICS & PHYSIOLOGY | BEHAVIOURAL GENETICS | HUMAN MOLECULAR BIOLOGY | FORENSICS SCIENCES | GENETICS & PHYSIOLOGY (43176) |
|-----------------|--|--|--|--|--|--|---|--|
| OLD CODE | 4377 | 4376 | | | 4377 | 4376 | | |
| DISCIPLINE CODE | 43118 | 43161 | 43130 | 43176 | 43118 | 43161 | 43130 | |
| YEAR | FIRST | | | | FIRST | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY C1 | BLGY1513 CHEM1514 PSIN1514 MATM1614 or MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1614 or MATM1534 | BLGY1513 CHEM1514 PHYS1534 or PHYS1514 MATM1614 or MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | PSDE1624 BLGY1623 BLGY1663 BLGY1683 STSB1624 CHEM1624 or CHEM1644 | BLGY1623 BLGY1643 BLGY1663 BLGY1683 CHEM1644 STSB1624 | BLGY1623 BLGY1663 CHEM1624 PHYS1644 or PHYS1624 MATM1544 | BLGY1623 BLGY1643 BLGY1663 BLGY1683 CHEM1644 STSB1624 |
| REQUIRED | CSIL1511 UFS101 *if NBT < 65% | CSIL1511 UFS101 *EALN1508 OR AGAN1508 | CSIL1511 UFS101 *EALN1508 OR AGAN1508 | CSIL1511 UFS101 *EALN1508 OR AGAN1508 | CSIL1521 | CSIL1521 | CSIL1521 | CSIL1521 |
| YEAR | SECOND | | | | SECOND | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY C2 | GENE2616 PSSO2614 | GENE2616 | FORS2616 GENE2616 CHEM2614 CHEM2632 | GENE2616 PHBG2616 | GENE2626 PSIH2724 | GENE2626 | FORS2626 GENE2626 CHEM2624 CHEM2642 | GENE2626 PHBG2626 |
| ELECTIVES (E) | ZLGY2612 PHBG2616 | BOCB2616 ZLGY2616 PHBG2616 MCBP2616 | | BOCB2616 ZLGY2616 MCBP2616 | ZLGY2626 | BOCE2626 ZLGY2626 PHBG2626 MCBP2616 | | BOCE2626 ZLGY2626 MCBP2626 |
| YEAR | THIRD | | | | THIRD | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY C3 | GENE3714 GENE3734 PSPA3714 PSRM3714 | GENE3714 GENE3734 HMBG3714 HMBG3734 | FORS3714 FORS3734 | GENE3714 GENE3734 PHBG3716 PHBN3712 | GENE3724 GENE3744 PSPE3724 PSTH3724 | GENE3724 GENE3744 HMBG3724 HMBG3744 | FORS3724 FORS3744 | GENE3724 GENE3744 PHBG3726 PHBE3722 |
| ELECTIVES (E) | ZLGY3714, ZLGY3734 PHBG3716, PHBN3712 HMBG3714, HMBG3734 | | GENE3714 + GENE3734 CHEM3714 +CHEM3734 | | ZLGY3724, ZLGY3744 PHBG3726, PHBE3722 HMBG3724, HMBG3744 FORS3744 | FORS3744 | GENE3724 + GENE3744 CHEM3724 + CHEM3744 | FORS3744 |

BIOLOGICAL SCIENCES FIELDS OF INTEREST 3: 42070, 42041, 42042, 42057

| LEARNING PROGRAMMES BIOLOGICAL SCIENCES FIELDS OF INTEREST 3 | | | | | | | | |
|---|--|---|---|--|---|--|--|--|
| Learning programmes in the BIOLOGICAL SCIENCES FIELDS OF INTEREST 3 offer 4 options, Plant health Ecology, Botany and Plant Pathology, Botany and Plant Breeding, Environmental Rehabilitation with Botany as a major in combination with other modules. Each student selects all | | | | | the compulsory modules (rows C1, C2, C3) for each study year and chooses modules as supportive electives (E) per semester to obtain at least 120 credits for each study year. | | | |
| DISCIPLINE | PLANT HEALTH ECOLOGY | BOTANY AND PLANT PATHOLOGY | BOTANY AND PLANT BREEDING | ENVIRONMENTAL REHABILITATION | PLANT HEALTH ECOLOGY | BOTANY AND PLANT PATHOLOGY | BOTANY AND PLANT BREEDING | ENVIRONMENTAL REHABILITATION |
| OLD CODE | | | | | | | | |
| NEW CODE | 42070 | 42042 | 42041 | 42057 | 42070 | 42042 | 42041 | 42057 |
| YEAR | FIRST | | | | FIRST | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY C1 | BLGY1513 CHEM1514 PHYS1534 MATM1614 or MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1614 or MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1614 or MATM1534 | BLGY1513 CHEM1514 GLGY1614 MATM1534 | BLGY1663 BLGY1643 CHEM1644 STSB1624 SCCS1624 ANIG1624 | BLGY1623 BLGY1643 CHEM1644 STSB1624 BLGY1683 SCCS1624 | BLGY1623 BLGY1643 BLGY1663 BLGY1683 CHEM1644 STSB1624 | BLGY1643 BLGY1663 STSB1624 SCCS1624 GLGY1624 |
| REQUIRED | CSIL1511 UFS101 *if NBT < 65% *EALN1508 OR AGAN1508 | | | | CSIL1521 | | | |
| YEAR | SECOND | | | | SECOND | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| | ENTO2616 MCBP2616 ONE OF SOIL2614 CLIM2614 BTNY2616+BTNY2602 GRAS2614 | BTNY2616 SOIL2614 MCBP2616 PLTB2613 | BTNY2616 GENE2616 PLTB2613 | BTNY2616 SOIL2614 GLGY2614 | ENTO2626 PPLG2624 ONE OF CROP2624 CLIM2624 BTNY2626 | BTNY2626 BTNY2602 PLTB2623 PPLG2624 | BTNY2626 BTNY2602 PLTB2623 GENE2626 | BTNY2602 BTNY2626 SOIL2624 GLGY2642 GLGY2644 |
| YEAR | THIRD | | | | THIRD | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| | ENTO3714 PPLG3714 PPLG3734 ONE OF ENTO3754 BTNY3734 | BTNY3702 BTNY3714 BTNY3754 PPLG3714 PPLG3734 | BTNY3702 BTNY3714 BTNY3734 BTNY3754 PLTB3714 | BTNY3702 BTNY3714 BTNY3734 SOIL3714 GLGY3774 | ENTO3724 PPLG3724 PPLG3744 ONE OF CLIM3724 BTNY3744 | BTNY3724 BTNY3744 PPLG3724 PPLG3744 | BTNY3724 BTNY3744 PLTB3724 PLTB3744 | BTNY3724 BTNY3744 SOIL3724 GLGY3784 |

11.4.1.6 BACHELOR OF SCIENCE MAJORING IN BUILDING SCIENCES

BUILDING SCIENCES FIELDS OF INTEREST 1: 42401, 44301, 42402, 44302

A degree for the academic preparation of a candidate for the profession of Quantity Surveying and Construction Management. Learning programmes in the BUILDING SCIENCES FIELDS OF INTEREST 1 offer Five options. Each student selects all the compulsory modules (rows C1, C2,

C3) for each study year and chooses modules as supportive electives (E) per semester to obtain at least 120 credits for each study year.

| | 1 | | 2 | | 3 | | 4 | |
|--------------------|--|----------------------|--|----------------------|--|----------------------|--|----------------------|
| DISCIPLINE | BSc MAJORING IN CONSTRUCTION MANAGEMENT (RES) | | BSc MAJORING IN QUANTITY SURVEYING (RES) | | BSc MAJORING IN CONSTRUCTION MANAGEMENT (DIS) | | BSc MAJORING IN QUANTITY SURVEYING (DIS) | |
| New code | 42401 | | 44301 | | 42402 | | 44302 | |
| | 4387 | | 4386 | | 4392 | | 4324 | |
| | 400 CREDITS | | 384 CREDITS | | 400 CREDITS | | 384 CREDITS | |
| YEAR | FIRST | | FIRST | | FIRST | | FIRST | |
| SEMESTER | FIRST | | FIRST | | FIRST | | FIRST | |
| COMPULSORY C1 | PQMR1504 COER1504 PDER1504 PHYS1512 EBUS1514 EBCS1514 | MATM1542 | DQFR1504 COER1504 PDER1504 PHYS1512 EBUS1514 EBCS1514 | MATM1542 | COED1504 PHYS1512 EBUS1514 PQMD1504 PDED1504 EBCS1514 | MATM1542 | COED1504 DQFD1504 PHYS1512 EBUS1514 PDED1504 EBCS1514 | MATM1542 |
| | EACC1614 OR | EMAC2624 | EACC1614 OR | EMAC2624 | EACC1614 OR | EMAC2624 | EACC1614 OR | EMAC2624 |
| ELECTIVES (One of) | ENGS1504 EGSR1504 | ENGS1504 EBCS1524 | ENGS1504 EGSR1504 | ENGS1504 EBCS1524 | ENGS1504 EGSD1504 | ENGS1504 EBCS1524 | ENGS1504 EGSD1504 | ENGS1504 EBCS1524 |
| REQUIRED | CSIL1511 UFS101 *if NBT < 65% | CSIL1521 | CSIL1511 UFS101 *EALN1508 or AGAN1508 | CSIL1521 | | | | |
| YEAR | SECOND | | SECOND | | SECOND | | SECOND | |
| SEMESTER | FIRST | | FIRST | | SECOND | | SECOND | |
| COMPULSORY C2 | COER2604(BOE204) PDER2604(END204) EECF1614 CSCR2604(KWE204) PQMR2604(POB204) BSCR2604(BOW204) LMER2604(HRG204) | LLBR2624(ABR224) | DQFR2604(BKF204) COER2604(BOE204) PDER2604(END204) EECF1614 BSCR2604(BOW204) CSCR2604(KWE204) LMER2604(HRG204) | | COED2604(COE204) PDED2604(PDE204) EECF1614 CSCD2604(CSC204) PQMD2604(PQM204) BSCD2604(BSC204) LMED2604(HRG204) | LLBR2624(ABR224) | DQFD2604(DQF204) COED2604(COE204) PDED2604(PDE204) EECF1614 BSCD2604(BSC204) CSCD2604(CSC204) LMED2604(HRG204) | |
| ELECTIVES (One of) | EBUS1614 ARGR2604 | EBUS1624 EECF1624 | EBUS1614 ARGR2604 | EBUS1624 EECF1624 | EBUS1614 ARGD2604 | EBUS1624 EECF1624 | EBUS1614 ARGR2604 | EBUS1624 EECF1624 |
| YEAR | THIRD | | THIRD | | THIRD | | THIRD | |
| SEMESTER | FIRST | SECOND | FIRST | SECOND | FIRST | SECOND | FIRST | SECOND |
| COMPULSORY C3 | PQMR3704(POB304) CCMR3704(BKR306) PDER3704(END304) CSCR3704(KWE304) BSCR3704(BOW304) COER3704(BOE304) DQSR3704(BKS302) | | DQFR3704(BKF304) CCMR3704(BKR306) PDER3704(END304) CSCR3704(KWE304) BSCR3704(BOW304) COER3704(BOE304) DQSR3704(BKS302) | | PQMD3704(PQM304) CCMD3704(CCM306) PDED3704(PDE304) CSCD3704(CSC304) BSCD3704(BSC304) COED3704(COE304) DQSD3704(DQS302) | | DQFD3704(DQF304) CCMD3704(CCM306) PDED3704(PDE304) CSCD3704(CSC304) BSCD3704(BSC304) COED3704(COE304) DQSD3704(DQS302) | |
| ELECTIVES (One of) | DQFR3704(BKF304) EBUS2714 | | EBUS2714 PQMR3704(POB304) | | DQFD3704(DQF304) EBUS2714 | | EBUS2714 PQMD3704(PQM304) | |

11.4.1.7 BACHELOR OF SCIENCE MAJORING IN CHEMICAL AND PHYSICAL SCIENCES

PHYSICAL AND CHEMICAL SCIENCES FIELDS OF INTEREST 44017, 44012, 44026, 42140, 42119, 42120, 42129, 42139

LEARNING PROGRAMMES PHYSICAL AND CHEMICAL SCIENCES FIELDS OF INTEREST

Learning programmes in chemical and physical sciences offer EIGHT main options with either:

- Physic and Chemistry as the two majors
- Physics and Astrophysics, as the two majors
- Physics and Agrometeorology, as the two majors
- Physic and Engineering Subjects, as the two majors
- Chemistry in combination Biological Subjects with one of the following: Biochemistry, Botany, Food Science or Microbiology as the other major.

Each student choose at least one option and enrol for or all compulsory modules in compulsory rows (C1, C2, C3). If electives are available the students need to choose enough elective modules (E) per semester to obtain at least 120 credits in each study year.

Physics can also be in combination with Mathematics, Geology and Computer Science. Chemistry can also be in combination with Forensic Science, Mathematics, Geology and Computer Science.

| DISCIPLINE | PHYSICS & CHEMISTRY | PHYSICS & ASTROPHYSICS | PHYSICS & AGROMETEOROLOGY | PHYSICS & ENGINEERING SUBJECTS | CHEMISTRY & BIOLOGICAL SUBJECTS | PHYSICS & CHEMISTRY | PHYSICS & ASTROPHYSICS | PHYSICS & AGROMETEOROLOGY | PHYSICS & ENGINEERING SUBJECTS | CHEMISTRY & BIOLOGICAL SUBJECTS |
|------------------------|--|-------------------------------------|--|--|--|--|---|---|--|--|
| CODE | 42140 | 44017 | 44012 | 44026 | 42119 (with Biochemistry) 42120 (with Botany) 42139 (with Microbiology) 42129 (with Food Science) | 42140 | 44017 | 44012 | 44026 | 42119 (with Biochemistry) 42120 (with Botany) 42139 (with Microbiology) 42129 (with Food Science) |
| YEAR | FIRST | | | | | FIRST | | | | |
| SEMESTER | FIRST | | | | | SECOND | | | | |
| COMPULSORY C1 | PHYS1514 CHEM1514 MATM1614 OR MATM1534 | PHYS1514 PHYA1554 MATM1614 | PHYS1514 MATM1614 OR MATM1534 | PHYS1514 MATA1614 MATM1614 CHEM1514 CISE1606 QALC1510 | CHEM1514 BLGY1513 PHYS1534 MATM1614 OR MATM1534 | PHYS1624 CHEM1624 MATM1624 OR MATM1544 | PHYS1624 PHYA1664 MATM1624 OR MATM1544 | PHYS1624 MATM1624 or MATM1544 | PHYS1624 MATA1624 MATM1624 QEDR1524 QEFO1520 | CHEM1624 BLGY1683 BLGY1643 STSB1624 MATM1544 |
| ELECTIVES E1 | CSIS1614 OR CSIS1634 STSM1614 PHYA1554 | CSIS1614 OR CSIS1634 STSM1614 | CSIS1614 OR CSIS1634 STSM1614 PHYA1554 CHEM1514 BLGY 1513 | | | CSIS1624 OR CSIS1644 STSM1624 STSA1624 SCCS1624 PHYA1664 | CSIS1624 OR CSIS1644 STSM1624 STSA1624 | CSIS1624 OR CSIS1644 STSM1624 STSA1624 PHYA1664 CHEM1624 | | PHYS1644 |
| REQUIRED *if NBT < 65% | CSIL1511 & UFS101 *EALN1508 OR AGAN1508 | | | | | CSIL1521 | | | | |
| YEAR | SECOND | | | | | SECOND | | | | |
| SEMESTER | FIRST | | | | | SECOND | | | | |
| COMPULSORY C2 | PHYS2614 PHYS2632 CHEM2614 CHEM2632 | PHYS2614 PHYS2632 PHYA2613 | PHYS2614 PHYS2632 CLIM2614 | PHYS2614 PHYS2632 MATA2614 MATM2614 | CHEM2614 CHEM2632 AT LEAST ONE OF BOCB2616 MCBP2616 BTNY2616+BTNY2602 FSCI2612+FSCC2612 | PHYS2624 PHYS2642 CHEM2624 CHEM2642 | PHYS2624 PHYS2642 PHYA2623 MATA2644 | PHYS2624 PHYS2642 CLIM2624 | PHYS2624 PHYS2642 MATA2644 MATM2664 | CHEM2624 CHEM2642 AT LEAST ONE OF BOCB2626 MCBE2626 BTNY2626 FSCC2622+FSCS2624 |

| DISCIPLINE | PHYSICS & CHEMISTRY | PHYSICS & ASTROPHYSICS | PHYSICS & AGROMETEOROLOGY | PHYSICS & ENGINEERING SUBJECTS | CHEMISTRY & BIOLOGICAL SUBJECTS | PHYSICS & CHEMISTRY | PHYSICS & ASTROPHYSICS | PHYSICS & AGROMETEOROLOGY | PHYSICS & ENGINEERING SUBJECTS | CHEMISTRY & BIOLOGICAL SUBJECTS |
|----------------------|--|--|--|--|--|--|--|--|--|--|
| CODE | 42140 | 44017 | 44012 | 44026 | 42119 (with Biochemistry) 42120 (with Botany) 42139 (with Microbiology) 42129 (with Food Science) | 42140 | 44017 | 44012 | 44026 | 42119 (with Biochemistry) 42120 (with Botany) 42139 (with Microbiology) 42129 (with Food Science) |
| ELECTIVES E2 | MATM2614 MATA2634 MATM2654 STSM2616 | MATM2614 MATA2634 MATM2654 STSM2616 | MATM2614 MATA2634 MATM2654 STSM2616 | QMAD2612 QMSC2613 CSIE2613 QMAT2613 | MATM2614 MATA2634 MATM2654 STSM2616 | MATA2644 MATM2624 MATM2664 STSM2626 | MATM2624 MATA2664 STSM2626 | MATA2644 MATM2624 MATM2664 STSM2626 | QSTR2624 QELT2722 GLGY2641+ GLGY2643 QWOR2520 QVAC2520 | MATA2644 MATM2624 MATM2664 STSM2626 |
| YEAR | THIRD | | | | | THIRD | | | | |
| SEMESTER | FIRST | | | | | SECOND | | | | |
| COMPULSORY C3 | PHYS3714 PHYS3732 PHYS3752 CHEM3714 CHEM3734 | PHYS3714 PHYS3732 PHYS3752 PHYA3772 PHYA3708 | PHYS3714 PHYS3732 PHYS3752 CLIM4814 | PHYS3714 PHYS3732 PHYS3752 QSM314 MATM2654 MATA3774 | CHEM3714 CHEM3734 ONE OF BOCM3714+BOCE3714 MCBG3714+BOCM3714 BTNY3714+BTNY3734 OR BTNY3754 FSCA3714+FSCI3714 | PHYS3724 PHYS3742 PHYS3762 CHEM3724 CHEM3744 | PHYS3724 PHYS3742 PHYS3762 PHYA3782 MATA3784 | PHYS3724 PHYS3742 PHYS3762 CLIM4824 | Choose ONE stream PHYS3724+ PHYS3742+ PHYS3762 OR QTHE3724+ QENV3724 | CHEM3724 CHEM3744 ONE OF BOCP3724+BOCS3724 MCBM3724+MCBP3724 OR MCBB3724 OR FSCB3724 BTNY3724+BTNY3744 MCBB3724+FSCB3724 |
| ELECTIVES E3 | CLNS3702 | CLNS3702 | CLNS3702 | ONE OF QSUR3614+ QSTR3714 CSIE3614+ QSIG3714 | CLNS3702 | | | | | |

11.4.1.8 BACHELOR OF SCIENCE IN COMPUTER AND INFORMATION TECHNOLOGY

COMPUTER AND INFORMATION TECHNOLOGY FIELD OF INTEREST I: 42221, 42237, 42238, 42240, 42253

SIX LEARNING PROGRAMMES IN INFORMATION TECHNOLOGY BSc(IT)

Learning programmes in Information Technology offer six main options with either

- Computer Science and Chemistry
- Computer Science and Mathematics
- Computer Science and Mathematical Statistics
- Computer Science and Physics
- Computer Science in Business and Management
- Information Systems (Will convert to B.CIS. in 2016)

Students SELECT ONE option and include all the compulsory modules in row C1,2,3 for all three study years. Students need to SELECT enough elective modules per semester from the compulsory row (C1) of any other subject field or from their own electives (E) to obtain at least 120 credits per year in the first year and the second year.

| DISCIPLINE | CHEMISTRY | MATHEMATICS | MATHEMATICAL STATISTICS | PHYSICS | BUSINESS & MANAGEMENT | INFORMATION SYSTEMS | CHEMISTRY | MATHEMATICS | MATHEMATICAL STATISTICS | PHYSICS | BUSINESS & MANAGEMENT | INFORMATION SYSTEMS |
|---------------------------|--|---|--|--|--|--|--|--|--|--|--|---|
| | 21 | 38 | 37 | 40 | 53 | | 21 | 38 | 37 | 40 | 53 | |
| YEAR | FIRST | | | | | | FIRST | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C1 | CSIS1614 CSIS1553 CHEM1514 ONE OF: MATM1614 MATM1534 | CSIS1614 CSIS1553 MATM1614 ONE OF: CHEM1514 PHYS1534 | CSIS1614 CSIS1553 STSM1614 MATM1614 | CSIS1614 CSIS1553 PHYS1514 ONE OF: MATM1614 MATM1534 | CSIS1614 CSIS1553 ONE OF: EHRM1514 EBUS1514 EBCS1514 OR: MATM1574 MATM1534 | CSIS1614 BSIS1513 EBUS1514 ONE OF: EHRM1514 EBCS1514 | CSIS1624 CSIS1664 CHEM1624 ONE OF: MATM1544 MATM1624 | CSIS1624 CSIS1664 MATM1624 ONE OF: CHEM1624 PHYS1644 | CSIS1624 CSIS1664 STSM1624 ONE OF: MATM1544 MATM1624 | CSIS1624 CSIS1664 PHYS1624 ONE OF: MATM1544 MATM1624 | CSIS1624 CSIS1664 ONE OF: EIOP1524 EACC1624 STSA1624 OR: MATM1584 MATM1544 | CSIS1624 BSIS1623 EIOP1524 EBCS5204 |
| ELECTIVES | | | | | | | CSIQ1682 | CSIQ1682 | CSIQ1682 | CSIQ1682 | CSIQ1682 | |
| REQUIRED *if NBT < 65% | CSIL1511 & UFS101 *EALN1508 OR AGAN1508 | | | | | | CSIL1521 | | | | | |
| YEAR | SECOND | | | | | | SECOND | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C2 | CSIS2614 CSIS2634 CHEM2614 CHEM2632 | CSIS2614 CSIS2634 MATM2654 MATM2614 | CSIS2614 CSIS2634 STSM2616 | CSIS2614 CSIS2634 PHYS2614 PHYS2632 | CSIS2614 CSIS2634 STSA2616 EBUS1614 | BSIS2614 CSIS2634 EEBS2614 EBUS1614 | CSIS2624 CSIS2664 CHEM2624 CHEM2642 | CSIS2624 CSIS2664 MATM2624 or MATA2644 or MATM2664 | CSIS2624 CSIS2664 STSM2626 | CSIS2624 CSIS2664 PHYS2624 PHYS2642 | CSIS2624 CSIS2664 STSA2626 EBUS1624 or EBMA2624 | CSIS2624 BSIS2624 STSA2626 EBUS1624 or EBMA2624 |
| ELECTIVES | MATM2654 MATA2634 | MATA2634 | MATM2654 MATM2614 MATA2634 | MATM2654 MATM2614 MATA2634 | EECF1614 | | MATA2644 CSIS2642 | CSIS2642 | MATA2644 MATM2664 CSIS2642 | MATA2644 CSIS2642 | EECF1624 CSIS2642 | CSIS2642 |
| YEAR | THIRD | | | | | | THIRD | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C3 | CSIS3714 CSIS3734 CHEM3714 CHEM3734 | CSIS3714 CSIS3734 MATA3774 ONE OF: MATM3714 or MATM3734 | CSIS3714 CSIS3734 STSM3714 STSM3734 | CSIS3714 CSIS3734 PHYS3714 PHYS3732 PHYS3752 | CSIS3714 CSIS3734 ONE OF: EBUS2714 + ETRM3714 OR: STSA3716 + STSA3732 | CSIS3714 BSIS3714 EBUS2714 + ETRM3714 | CSIS3724 CSIS3744 CHEM3724 CHEM3744 | CSIS3724 CSIS3744 MATM3724 ONE OF: MATM3744 MATA3784 | CSIS3724 CSIS3744 STSM3724 STSM3744 | CSIS3724 CSIS3744 PHYS3724 PHYS3742 PHYS3762 | CSIS3724 CSIS3744 ONE OF: ESBM2724 + EBMA3725 OR: STSA3726 + STSA3742 | CSIS3724 CSIS3744 ESBM2724 + EBMA3725 |

11.4.1.9 BACHELOR OF SCIENCE MAJORING IN GEOSCIENCES

GEOGRAPHY FIELD OF INTEREST 1: 43360, 43346, 43354, 43312 (4364) (4382)

LEARNING PROGRAMMES IN GEOSCIENCES FIELD OF INTEREST I

The learning programmes in Geography and the Environmental sciences are studies of the properties and processes in the earth and on the surface and encompass a holistic study of the human environment and accompanying interactions and relationships. The programme is aimed at students who are interested in various aspects of the environment and can lead to specialisation as environmentalists. Careers in these sciences are divergent because all institutions that are involved with resource utilisation are legally obliged

to examine the impact of their activities on the environment. The connection of geographical information and computer technology simplifies the storage, processing, modelling and presentation of information and expedites decision making.

Each student selects all the compulsory modules (rows C1, C2, C3) for all three study years and chooses modules as supportive electives (E) per semester to obtain at least 120 credits for each year of study.

| DISCIPLINE | GEO-INFORMATICS | GEOGRAPHY AND STATISTICS | GEOGRAPHY AND ENVIRONMENTAL SCIENCES | GEOGRAPHY AND AGROMETEOROLOGY | GEO-INFORMATICS | GEOGRAPHY AND STATISTICS | GEOGRAPHY AND ENVIRONMENTAL SCIENCES | GEOGRAPHY AND AGROMETEOROLOGY |
|---------------|--|--|---|--|--|--|--|--|
| NEW CODE | 43360 | 43346 | 43354 | 43312 | 43360 | 43346 | 43354 | 43312 |
| OLD CODE | 4382 | | 4364 | | 4382 | | 4364 | |
| YEAR | FIRST | | | | FIRST | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY C1 | GEOP1514 CSIS1614 MATM1534 PHYS1514 EBUS1514 | GEOP1514 CSIS1534 EBUS1514 MATM1534 | GEOP1514 EBUS1514 BLGY1513 CHEM1514 MATM1534 | GEOP1514 EBUS1514 BLGY1513 CHEM1514 MATM1534 | GEOH1624 CSIS1624 CSIS1664 MATM1544 STSA1624 | GEOH1624 STSA1624 CSIS1644 SCCS1624 | GEOH1624 STSA1624 BLGY1643 BLGY1663 SCCS1624 | GEOH1624 STSA1624 BLGY1643 BLGY1663 SCCS1624 |
| REQUIRED | CSIL1511 UFS101 | CSIL1511 UFS101 | CSIL1511 UFS101 | CSIL1511 UFS101 | CSIL1521 | CSIL1521 | CSIL1521 | CSIL1521 |
| *if NBT < 65% | *EALN1508 OR AGAN1508 | *EALN1508 OR AGAN1508 | *EALN1508 OR AGAN1508 | *EALN1508 OR AGAN1508 | | | | |
| YEAR | SECOND | | | | SECOND | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY C2 | GEOH2614 GEOP2614 CSIS2634 CSIS2614 KWEG2612 | GEOH2614 GEOP2614 STSA2616 EBUS2714 | GEOH2614 GEOP2614 SOIL2614 | GEOH2614 GEOP2614 SOIL2614 CLIM2614 | GEOP2624 GISC2724 CSIS2664 | GEOP2624 GISC2724 STSA2626 | GEOP2624 GISC2724 SOIL2624 GLGY2644 | GEOP2624 GISC2724 SOIL2624 CLIM2624 GLGY2644 |
| ELECTIVES E1 | EBUS2714 CSIS1553 | | BTNY2616 + BTNY2602 OR ZLGY2612 | | | | BTNY2626 OR ZLGY2626 | |
| YEAR | THIRD | | | | THIRD | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY C3 | GEOP3714 GISC3704 CSIS3734 CSIS3714 MATM2654 | GEOP3714 STSA3716 STSA3732 GEOH3714 | GEOP3714 SOIL3714 EBUS2714 | GEOP3714 GEOH3714 SOIL3714 CLIM3714 | GEOP3724 GISC3724 CSIS3744 CSIS3724 | GEOP3724 GISC3724 STSA3726 STSA3742 | GEOP3724 GISC3724 SOIL3724 | GEOP3724 GISC3724 SOIL3724 CLIM3724 |
| ELECTIVES E1 | GEOH3714 MATM2654 | | BTNY3702 + BTNY3714 + BTNY3734 + OR ZLGY3734 + ZLGY3714 | | | | | |

11.4.1.10 BACHELOR OF SCIENCE MAJORING IN GEOSCIENCES

GEOLOGY FIELD OF INTEREST 2: 43535, 43528, 43532, 43521, 43533, 43540 (4361, 4362, 4365)

| LEARNING PROGRAMMES IN GEOSCIENCES FIELD OF INTEREST 2 | | | | | | | | | | | | |
|---|--|--|--|--|--|--|---|--|--|--|--|--|
| Learning programmes in GEOLOGY FIELD OF INTEREST 1 offer SIX main options with either: Geology specialisation, Geochemistry, Environmental Geology, Geology and Chemistry as the two majors, Geology and Geography as the other majors, Geology and Physics as the two majors. Each | | | | | | | student enrolls for or all compulsory modules in compulsory rows (C1, C2, C3). If electives are available the students need to choose enough elective modules (E) per semester to obtain at least 120 credits in each study year. | | | | | |
| DISCIPLINE | GEOLOGY | GEOCHEMISTRY | ENVIRONMENTAL GEOLOGY | CHEMISTRY | GEOGRAPHY | PHYSICS | GEOLOGY | GEOCHEMISTRY | ENVIRONMENTAL GEOLOGY | CHEMISTRY | GEOGRAPHY | PHYSICS |
| CODE | 43535 | 43532 | 43528 | 43521 | 43533 | 43540 | 43535 | 43532 | 43528 | 43521 | 43533 | 43540 |
| YEAR | FIRST | | | | | | FIRST | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C1 | GLGY1614 CHEM1514 | GLGY1614 CHEM1514 PHYS1514 | GLGY1614 CHEM1514 GEOP1514 | GLGY1614 CHEM1514 | GLGY1614 CHEM1514 GEOP1514 | GLGY1614 CHEM1514 PHYS1514 | GLGY1624 CHEM1624 or CHEM1644 MATM1544 | GLGY1624 CHEM1624 or CHEM1644 MATM1544 | GLGY1624 SCCS1624 EBUS1624 | GLGY1624 CHEM1624 | GLGY1624 GEOH1624 | GLGY1624 PHYS1624 |
| | MATM1534 | MATM1534 | MATM1534 | MATM1534 | MATM1534 | MATM1534 | STSA1624 | STSA1624 | STSA1624 | STSA1624 MATM1544 | STSA1624 | STSA1624 MATM1544 |
| ELECTIVES E | ONE OF PHYS1514 PHYS1534 GEOP1514 | | | ONE OF PHYS1514 PHYS1534 GEOP1514 | | | TWO OF GEOH1624 CHEM1644 CHEM1624 PHYS1644 PHYS1624 MATM1544 | | | | ONE OF CHEM1624 CHEM1644 SCCS1624 | |
| REQUIRED *if NBT < 65% | CSIL1511 UFS101 *EALN1508 OR AGAN1508 | | | | | | CSIL1521 | | | | | |
| YEAR | SECOND | | | | | | SECOND | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C2 | GLGY2602 GLGY2612 GLGY2614 GLGY2632 GLGY2652 ONE OF CHEM2614 GEOP2614 PHYS2614 | GLGY2602 GLGY2612 GLGY2614 GLGY2632 GLGY2652 CHEM2632 CHEM2614 | GLGY2602 GLGY2612 GLGY2614 GLGY2632 GLGY2652 SOIL2614 | GLGY2602 GLGY2612 GLGY2614 GLGY2632 GLGY2652 CHEM2632 CHEM2614 | GLGY2602 GLGY2612 GLGY2614 GLGY2632 GLGY2652 GEOH2614 GEOP2614 | GLGY2602 GLGY2612 GLGY2614 GLGY2632 GLGY2652 PHYS2614 PHYS2632 | GLGY2622 GLGY2624 GLGY2642 GLGY2644 GISC2724 | GLGY2622 GLGY2624 GLGY2642 GLGY2644 CHEM2642 | GLGY2622 GLGY2624 GLGY2642 GLGY2644 SOIL2624 GISC2724 | GLGY2622 GLGY2624 GLGY2642 GLGY2644 CHEM2642 | GLGY2622 GLGY2624 GLGY2642 GLGY2644 GEOH2624 GISC2724 | GLGY2622 GLGY2624 GLGY2642 GLGY2644 PHYS2624 PHYS2642 |
| YEAR | THIRD | | | | | | THIRD | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C3 | GLGY3714 GLGY3734 GLGY3754 GLGY3774 | CHEM3714 GLGY3714 GLGY3754 GLGY3774 | SOIL3714 GLGY3714 GLGY3754 GLGY3774 | CHEM3714+ CHEM3734 GLGY3714 ONE OF GLGY3734 GLGY3754 GLGY3774 | GEOH3714 GEOP3714 GLGY3714 ONE OF GLGY3754 GLGY3774 | PHYS3714 PHYS3732 PHYS3752 GLGY3714 ONE OF GLGY3754 GLGY3774 | GLGY3724 GLGY3744 GLGY3764 GLGY3784 | GLGY3724 GLGY3764 GLGY3784 ONE OF GLGY3744 CHEM3724 | SOIL3724 GLGY3724 GLGY3764 GLGY3784 | CHEM3724 CHEM3744 GLGY3724 ONE OF GLGY3744 GLGY3764 | GEOH3724 GISC3724 GLGY3724 ONE OF GLGY3744 GLGY3764 GLGY3784 | PHYS3724 PHYS3742 PHYS3762 GLGY3724 ONE OF GLGY3764 GLGY3784 |

11.4.1.11 BACHELOR OF SCIENCE MAJORING IN MATHEMATICAL SCIENCES

MATHEMATICAL SCIENCES FIELDS OF INTEREST 1: 43816, 43821, 43837, 43840, 43859 (4331, 4394)

LEARNING PROGRAMMES IN MATHEMATICAL SCIENCES FIELDS OF INTEREST I

Learning programmes in Mathematics offer FIVE main options with a combination of disciplines:

- **Mathematics** and Applied Mathematics
- **Mathematics** and Chemistry
- **Mathematics** and Mathematical Statistics
- **Mathematics** and Physics
- **Mathematics** and Finances

Students SELECT Mathematics and one other DISCIPLINE and include all the compulsory modules in row (C1, C2, C3) of each of the selected disciplines for all three study years. Students need to SELECT enough elective modules per semester from the compulsory row (C1, C2, and C3) of any other discipline or from the elective row (E) for their selected disciplines to obtain at least 120 credits for each study year.

| DISCIPLINE | MATHEMATICS & APPLIED MATHEMATICS | MATHEMATICS & CHEMISTRY | MATHEMATICS & MATHEMATICAL STATISTICS | MATHEMATICS & PHYSICS | MATHEMATICS & FINANCE | MATHEMATICS & APPLIED MATHEMATICS | MATHEMATICS & CHEMISTRY | MATHEMATICS & MATHEMATICAL STATISTICS | MATHEMATICS & PHYSICS | MATHEMATICS & FINANCE |
|---------------------------|--|--|--|--|--|--|--|--|--|---|
| OLD CODE | 4331 | 4331 | 4331 | 4331 | 4394 | 4331 | 4331 | 4331 | 4331 | 4394 |
| NEW CODE | 43816 | 43821 | 43837 | 43840 | 43859 | 43816 | 43821 | 43837 | 43840 | 43859 |
| YEAR | FIRST | | | | | FIRST | | | | |
| SEMESTER | FIRST | | | | | SECOND | | | | |
| COMPULSORY C1 | MATM1614 MATA1614 | MATM1614 CHEM1514 | MATM1614 STSM1614 | MATM1614 PHYS1514 PHYA1554 | MATM1614 EECF1614 STSM1614 EACC1614 | MATM1624 MATA2614 CSIQ1682 | MATM1624 CHEM1624 | STSM1624 CSIQ1682 MATM1624 | MATM1624 PHYS1624 PHYA1664 | MATM1624 EECF1624 STSM1624 EACC1624 |
| REQUIRED *if NBT < 65% | CSIL1511 UFS101 *EALN1508 OR AGAN1508 | | | | | CSIL1521 | | | | |
| YEAR | SECOND | | | | | SECOND | | | | |
| SEMESTER | FIRST | | | | | SECOND | | | | |
| COMPULSORY C2 | MATM2614 MATA2614 MATA2634 MATM2654 | MATM2614 CHEM2614 CHEM2632 | MATM2614 STSM2616 | MATM2614 PHYS2614 PHYS2632 | MATM2614 EACC2608 EFES2714 ACSF2716 | MATM2624 MATM2664 MATA2644 | MATM2624 MATM2664 CHEM2624 CHEM2642 | MATM2624 MATM2664 STSM2626 | MATM2624 MATM2664 PHYS2624 PHYS2642 | MATM2624 MATM2664 EACC2608 EFES2724 ACSF2726 or ACSF2746 STSM2626 |
| ELECTIVES E | | | | | | | | | | |
| YEAR | THIRD | | | | | THIRD | | | | |
| SEMESTER | FIRST | | | | | SECOND | | | | |
| COMPULSORY C3 | MATM3714 MATM3734 MATA3774 | MATM3714 MATM3734 CHEM3714 CHEM3734 | MATM3714 MATM3734 STSM3714 STSM3734 | MATM3714 MATM3734 PHYS3714 PHYS3732 PHYS3752 | MATM3714 MATM3734 EFET3714 | MATM3724 MATM3744 MATA3764 MATA3784 | MATM3724 MATM3744 CHEM3724 CHEM3744 | MATM3724 MATM3744 STSM3724 STSM3744 | MATM3724 MATM3744 PHYS3724 PHYS3742 PHYS3762 | MATM3724 MATM3744 EFET3724 |

MATHEMATICAL SCIENCES FIELDS OF INTEREST 2: 43712, 43755, 43701, 43773 (4331, 4394, 4396)

LEARNING PROGRAMMES IN MATHEMATICAL SCIENCES FIELDS OF INTEREST 2

Learning programmes in Mathematical Statistics offer FOUR main options with a combination of disciplines:

- **Mathematical Statistics** and Agrometeorology (**Climate Sciences**)
- **Mathematical Statistics** and Economics (**Econometrics**)
- **Mathematical Statistics** and Investment Sciences (**Investment Science**)
- **Mathematical Statistics** and Psychology (**Psychometrics**)

Students SELECT Mathematical Statistics and one other DISCIPLINE and include all the compulsory modules in row (C1, C2, C3) of each of the selected disciplines for all three study years. Students need to SELECT enough elective modules per semester from the compulsory row (C1, C2, and C3) of any other discipline or from the elective row (E) for their selected disciplines obtain of at least 120 credits for each study year.

| DISCIPLINE | CLIMATE SCIENCE | ECONOMETRICS | INVESTMENT SCIENCE | PSYCHOMETRICS | CLIMATE SCIENCE | ECONOMETRICS | INVESTMENT SCIENCE | PSYCHOMETRICS |
|-----------------|---|--|---|---|---|---|--|---|
| OLD CODE | | 4396 | 4332 | 4333 | | 4396 | 4332 | 4333 |
| DISCIPLINE CODE | 43712 | 43755 | 43701 | 43773 | 43712 | 43755 | 43701 | 43773 |
| YEAR | FIRST | | | | FIRST | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY C1 | STSM1614 CSIS1634 PHYS1534 MATM1614 | STSM1614 EECF1614 EACC1614 MATM1614 | STSM1614 EECF1614 EACC1614/EFAC1614 ACSF1513 MATM1614 | STSM1614 PSIN1514 EHRM1514 MATM1614 | STSM1624 CSIS1644 SCCS1624 MATM1624 | STSM1624 EECF1624 EACC1624 MATM1624 | STSM1624 EECF1624 EFAC1624 ACSF1523 MATM1624 | STSM1624 PSDE1624 EIOP1524 MATM1624 |
| REQUIRED | CSIL1511 UFS101 | | | | CSIL1521 | | | |
| *if NBT < 65% | *EALN1508 or AGAN1508 | | | | | | | |
| YEAR | SECOND | | | | SECOND | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY C2 | STSM2616 CLIM2614 MATA2634 ONE OF MATM2614 MATM2654 | STSM2616 MATM2654 EMIC2714 ONE OF MATM2614 MATA2634 *EFAC2708 EFES2714 | STSM2616 ATWF2716 EMIC2714 *EFAC2708 | PSSO2614 MATA2634 ONE OF MATM2614 MATM2654 | STSM2626 CLIM2624 ONE OF MATM2624 MATA2644 MATM2664 | STSM2626 EMAC2724 ONE OF EFES2724 MATM2624 MATA2644 MATM2664 | STSM2626 EMAC2724 ACSF2746 MATA2644 | STSM2626 PSIH2724 ONE OF MATA2644 MATM2664 |
| YEAR | THIRD | | | | THIRD | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY C3 | STSM3714 STSM3734 CLIM3714 ONE OF MATM3714 MATM3734 MATA3774 | STSM3714 STSM3734 EFET3714 EINT3715 | STSM3714 STSM3734 *ACSF3706 ISCI3714 EINT3715 | PSPA3714 STSM3714 STSM3734 PSRM3714 ONE OF MATM3714 MATM3734 MATA3774 | STSM3724 STSM3744 CLIM3724 ONE OF MATM3724 MATM3744 MATA3764 MATA3784 | STSM3724 STSM3744 EECM3724 ONE OF EFET3724 EECT3725 EMNF2724 | STSM3724 STSM3744 *ACSF3706 EMNF2724 | PSPE3724 STSM3724 STSM3744 PSTH3724 ONE OF MATM3724 MATM3744 MATA3764 MATA3784 |

MATHEMATICAL SCIENCES FIELDS OF INTEREST 3: 44650, 44655, 44673

LEARNING PROGRAMMES IN MATHEMATICAL SCIENCES FIELDS OF INTEREST 3

Learning programmes in Statistics offers TWO main options with a combination of disciplines:

- **Statistics** and Accounting
- **Statistics** and Economics
- **Statistics** and Psychology

Students Students SELECT Statistics and one other DISCIPLINE and include all the compulsory modules in row (C1, C2, C3) of each of the selected disciplines for all three study years. Students need to SELECT enough elective modules per semester from the compulsory row (C1, C2, and C3 to obtain at least 120 credits for each study year.

| DISCIPLINE | ACCOUNTING | ECONOMICS | PSYCHOLOGY | ACCOUNTING | ECONOMICS | PSYCHOLOGY |
|---------------------------|--|---|--|---|---|---|
| NEW CODE | 44650 | 44655 | 44673 | 44650 | 44655 | 44673 |
| YEAR | FIRST | | | FIRST | | |
| SEMESTER | FIRST | | | SECOND | | |
| COMPULSORY C1 | EBCS1514 MATM1614 OR MATM1534 EACC1614 ONE OF EECF1614 AGEC1514 | EBCS1514 MATM1614 OR MATM1534 EECF1614 ONE OF EACC1614 AGEC1514 | EBCS1514 MATM1614 OR MATM1534 PSIN1514 EHRM1514 | EBCS1524 MATM1624 OR MATM1544 EACC1624 ONE OF EECF1624 AGEC1624 | EBCS1524 MATM1624 OR MATM1544 EECF1624 ONE OF EACC1624 AGEC1624 | EBCS1524 MATM1624 OR MATM1544 PSIH2724 EIOP52305 |
| REQUIRED *if NBT < 65% | CSIL1511 UFS101 *EALN1508 or AGAN1508 | | | CSIL1521 | | |
| YEAR | SECOND | | | SECOND | | |
| SEMESTER | FIRST | | | SECOND | | |
| COMPULSORY C2 | STSA2616 MATA2634 *EACC2608 ONE OF EFES2714 EMIC2714 AGEC2614 | STSA2616 MATA2634 EMIC2714 ONE OF EFES2714 AGEC2614 | STSA2616 MATA2634 PSPA3714 ECAP2614 | STSA2626 *EACC2608 ONE OF EMAC2724 EFES2724 AGEC2624 | STSA2626 EMAC2724 ONE OF EFES2724 AGEC2624 | STSA2626 PSDE1624 ELRM2624 |
| YEAR | THIRD | | | THIRD | | |
| SEMESTER | FIRST | | | SECOND | | |
| COMPULSORY C3 | STSA3716 STSA3732 EACC3708 ONE OF EFET3714 EINT3715 AGEC3714 | STSA3716 STSA3732 EFET3714 ONE OF EINT3715 AGEC3714 | STSA3716 STSA3732 PSSO2614 ETRM3714 | STSA3726 STSA3742 ONE OF EFET3724 EECT3725 AGEC3724 EECM3724 EBUS7640 | STSA3726 STSA3742 EFET3724 ONE OF EECT3725 AGEC3724 EECM3724 EBUS7640 | STSA3726 STSA3742 EPPM3724 |

11.4.2 BACHELOR OF SCIENCE IN AGRICULTURE

11.4.2.1 AGRICULTURAL SCIENCES FIELD OF INTEREST 1: AGROMETEOROLOGY 51213, 51244, 51211, 51251, 51236, 51242

| LEARNING PROGRAMMES IN BACHELOR OF AGRICULTURAL SCIENCES AND THE AGROMETEOROLOGY FIELD OF INTEREST 1 | | | | | | | | | | | | |
|--|--|--|--|--|---|--|---|---|--|---|--|--|
| Learning programmes in the Agrometeorology as main field of interest offer 6 options with a combination of Agrometeorology as a major for specialisation in the fourth year and a minor from either one of Agronomy, Soil Science, Agricultural Economics, Agricultural Engineering, Grassland Science or Plant Pathology. Each student registers for all the compulsory modules (row C1, C2, C3, | | | | | | | C4) during the four years of study and combines them with all the compulsory modules for the minor. If a student wants to register for the Agricultural Economics minor, two extra modules for the first year are required. | | | | | |
| SPECIALISATION | Agrometeorology Agronomy | Agrometeorology Soil Science | Agrometeorology Agricultural Economics | Agrometeorology Agricultural Engineering | Agrometeorology Grassland Science | Agrometeorology Plant Pathology | Agrometeorology Agronomy | Agrometeorology Soil Science | Agrometeorology Agricultural Economics | Agrometeorology Agricultural Engineering | Agrometeorology Grassland Science | Agrometeorology Plant Pathology |
| CODE | 51213 | 51244 | 51211 | 51251 | 51236 | 51242 | 51213 | 51244 | 51211 | 51251 | 51236 | 51242 |
| OLD CODE | 5323 | 5334 | | | 5341 | 5340 | 5323 | 5334 | | | 5341 | 5340 |
| YEAR | FIRST | | | | | | FIRST | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C1 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | AGEC1514 BLGY5113 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 | AGEC1624 BLGY6143 CHEM1644 SCCS1624 ANIG1624 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 |
| REQUIRED *if NBT < 65% | CSIL1511 UFS101 *EALN1508 or AGAN1508 | | | | | | CSIL1521 | | | | | |
| YEAR | SECOND | | | | | | SECOND | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C2 | CLIM2614 CROP2614 SOIL2614 | CLIM2614 SOIL2614 CROP2614 | CLIM2614 AGEC2614 CROP2614 | CLIM2614 CROP2614 SOIL2614 | CLIM2614 GRAS2614 SOIL2614 | CLIM2614 CROP2614 SOIL2614 | CLIM2624 CROP2624 SOIL2624 | CLIM2624 SOIL2624 CROP2624 | CLIM2624 AGEC2624 CROP2624 | CLIM2624 AGEG2624 SOIL2624 | CLIM2624 SOIL2624 CROP2624 | CLIM2624 PPLG2624 PLTB2623 |
| ELECTIVE | ONE OF: BOCH2614 ENTO2614 GRAS2614 | ONE OF: BOCH2614 ENTO2614 GRAS2614 | ONE OF: SOIL2614 BOCH2614 ENTO2614 GRAS2614 | ONE OF: BOCH2614 ENTO2614 GRAS2614 | ONE OF: CROP2614 BOCH2614 ENTO2614 GRAS2614 | ONE OF: BOCH2614 ENTO2614 GRAS2614 | ONE OF: AGEG2624 PLTB2623 PPLG2624 | ONE OF: AGEG2624 PLTB2623 PPLG2624 | ONE OF: SOIL2624 AGEG2624 | ONE OF: CROP2624 PPLG2624 PLTB2623 | ONE OF: AGEG2624 PLTB2623 | ONE OF: CROP2624 SOIL2624 AGEG2624 |
| YEAR | THIRD | | | | | | THIRD | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C3 | CLIM3714 CROP3714 SOIL3714 | CLIM3714 SOIL3714 CROP3714 | CLIM3714 AGEC3714 CROP3714 | CLIM3714 AGEG3714 SOIL3714 | CLIM3714 GRAS3714 SOIL3714 | CLIM3714 PPLG3714 PPLG3734 | CLIM3724 CROP3724 SOIL3724 | CLIM3724 SOIL3724 CROP3724 | AGEC3724 CLIM3724 CROP3724 | CLIM3724 AGEG3724 SOIL3724 | CLIM3724 GRAS3724 SOIL3724 | CLIM3724 PPLG3724 PPLG3744 |
| ELECTIVE | ONE OF: AGEG3714 GRAS3714 | ONE OF: AGEG3714 GRAS3714 | ONE OF: SOIL3714 AGEG3714 GRAS3714 | ONE OF: CROP3714 GRAS3714 | ONE OF: CROP3714 AGEG3714 | ONE OF: CROP3714 SOIL3714 PLTB3714 | ONE OF: AGEG3724 PLTB3724 PPLG3724 GRAS3724 | ONE OF: AGEG3724 PLTB3724 PPLG3724 GRAS3724 | ONE OF: SOIL3724 AGEG3724 GRAS3724 | ONE OF: CROP3724 PPLG3724 ANIN3744 AGEG3724 | ONE OF: CROP3724 ANIN3744 AGEG3724 | ONE OF: CROP3724 SOIL3724 PLTB3724 |
| YEAR | FOURTH | | | | | | FOURTH | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C4 | CLIM4814 CLIM4834 SCCS4814 | CLIM4814 CLIM4834 SCCS4814 | CLIM4814 CLIM4834 SCCS4814 | CLIM4814 CLIM4834 SCCS4814 AGEG3724 | CLIM4814 CLIM4834 SCCS4814 | CLIM4814 CLIM4834 SCCS4814 | CLIM4824 CLIM4844 SCCS4824 | CLIM4824 CLIM4844 SCCS4824 | CLIM4824 CLIM4844 SCCS4824 | CLIM4824 CLIM4844 SCCS4824 AGEG4824 | CLIM4824 CLIM4844 SCCS4824 | CLIM4824 CLIM4844 SCCS4824 ONE OF PPLG4824 PPLG4844 |
| ELECTIVE | ONE OF: CROP4814 CROP4834 | ONE OF: SOIL4814 SOIL4834 | ONE OF: AGEC4814 AGEC4834 | | ONE OF: GRAS4814 GRAS4834 | PPLG4834 PPLG3714 | ONE OF: CROP4824 CROP6824 | ONE OF: SOIL4824 SOIL4844 | ONE OF: AGEC4844/4824 | | ONE OF: GRAS4824 GRAS4844 | |

11.4.2.2 AGRICULTURAL SCIENCES FIELD OF INTEREST 2: AGRONOMY 51312, 51344, 51311, 51315, 51327, 51329, 51341, 51342

| LEARNING PROGRAMMES IN BACHELOR OF AGRICULTURAL SCIENCES IN AGRONOMY FIELD OF INTEREST 2 | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|---|---|--|--|--|---|---|---|
| Learning programmes in the Agrometeorology as main field of interest offer 8 options with a combination of Agronomy s a major for specialisation in the fourth year and a minor from either one of Agrometeorology, Soil Science, Agricultural Economics, Animal Science, Entomology, Food Science, Plant Breeding or Plant Pathology. Each student registers for all the compulsory modules (row C1, | | | | | | | | | C2, C3, C4) during the four years of study and combines them with all the compulsory modules for the minor. If a student wants to register for the Agricultural Economics minor, two extra modules for the first year are required. | | | | | | | |
| LEARNING PROGRAMME | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| SPECIALISATION | Agrometeorology | Agrometeorology | Agrometeorology | Agrometeorology | Agrometeorology | Agrometeorology | Agrometeorology | Agrometeorology | Agrometeorology | Agrometeorology | Agrometeorology | Agrometeorology | Agrometeorology | Agrometeorology | Agrometeorology | Agrometeorology |
| NEW CODE | 51312 | 51344 | 51311 | 51315 | 51327 | 51329 | 51341 | 51342 | 51312 | 51344 | 51311 | 51315 | 51327 | 51329 | 51341 | 51342 |
| OLD CODE | 5323 | 5324 | 5321 | 5326 | 5351 | 5329 | 5324 | 5325 | 5323 | 5324 | 5321 | 5326 | 5351 | 5329 | 5324 | 5325 |
| YEAR | FIRST | | | | | | | | FIRST | | | | | | | |
| SEMESTER | FIRST | | | | | | | | SECOND | | | | | | | |
| COMPULSORY C1 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | AGEC1514 BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 | AGEC1624 BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 |
| REQUIRED *if NBT < 65% | CSIL1511 UFS101 *EALN1508 or AGAN1508 | | | | | | | | CSIL1521 | | | | | | | |
| SEMESTER | SECOND | | | | | | | | SECOND | | | | | | | |
| COMPULSORY C2 | CROP2614 SOIL2614 CLIM2614 | CROP2614 SOIL2614 CLIM2614 | CROP2614 AGEC2614 SOIL2614 | CROP2614 ANIG2614 BOCH2614 | CROP2614 ENTO2616 SOIL2614 | CROP2614 BOCH2614 FSCC2612 FSCI2612 | CROP2614 SOIL2614 CLIM2614 PLTB2613 | CROP2614 SOIL2614 CLIM2614 PLTB2613 | CROP2624 SOIL2624 CLIM2624 | CROP2624 SOIL2624 CLIM2624 | CROP2624 AGEC2624 | CROP2624 CLIM2624 ANIG2624 | CROP2624 ENTO2626 SOIL2624 | CROP2624 FSCC2622 FSCS2624 IQMQ2622 | CROP2624 PLTB2623 PPLG2624 | CROP2624 PLTB2623 PPLG2624 |
| ELECTIVES | ONE OF: BOCH2614 ENTO2614 GRAS2614 | ONE OF: BOCH2614 ENTO2614 GRAS2614 | ONE OF: BOCH2614 ENTO2614 GRAS2614 | ONE OF: ENTO2614 SOIL2614 CLIM2614 GRAS2614 | ONE OF: BOCH2614 CLIM2614 | ONE OF: ENTO2614 SOIL2614 CLIM2614 GRAS2614 | | | ONE OF: AGEG2624 PLTB2623 PPLG2624 | ONE OF: AGEG2624 PLTB2623 PPLG2624 | ONE OF: AGEG2624 CLIM2624 PLTB2623 PPLG2624 | ONE OF: SOIL2624 CLIM2624 PPLG2624 | ONE OF: CLIM2624 PPLG2624 | ONE OF: SOIL2624 CLIM2624 EBUS2714 | ONE OF: SOIL2624 AGEG2624 CLIM2624 | ONE OF: SOIL2624 AGEG2624 CLIM2624 |
| YEAR | THIRD | | | | | | | | THIRD | | | | | | | |
| SEMESTER | FIRST | | | | | | | | SECOND | | | | | | | |
| COMPULSORY C3 | CROP3714 CLIM3714 SOIL3714 | CROP3714 SOIL3714 CLIM3714 | CROP3714 SOIL3714 AGEC3714 | CROP3714 ANIP3714 ANIB3714 ANIN3734 | CROP3714 ENTO3714 ENTO3754 | CROP3714 FSCA3714 FSCC3714 NUTE3714 | CROP3714 PLTB3714 SOIL3714 | CROP3714 PPLG3714 PPLG3734 | CROP3724 CLIM3724 SOIL3724 | CROP3724 SOIL3724 CLIM3724 | CROP3724 AGEC3724 SOIL3724 | CROP3724 ANIP3724 ANIB3724 ANIN3744 | CROP3724 ENTO3724 ENTO3744 | CROP3724 FSCP3724 FSCB3724 | CROP3724 PLTB3724 PLTB3744 | CROP3724 PPLG3724 PPLG3744 |
| ELECTIVES | ONE OF: AGEG3714 GRAS3714 | ONE OF: AGEG3714 GRAS3714 | ONE OF: AGEG3714 CLIM3714 GRAS3714 | | ONE OF: SOIL3714 CLIM3714 PLTB3714 | | ONE OF: CLIM3714 PPLG3714 | ONE OF: SOIL3714 CLIM3714 PLTB3714 | ONE OF: AGEG3724 PLTB3724 PPLG3724 GRAS3724 | ONE OF: AGEG3724 PLTB3724 PPLG3724 GRAS3724 | ONE OF: AGEG3724 CLIM3724 PPLG3724 GRAS3724 | | ONE OF: SOIL3724 CLIM3724 PPLG3724 | ONE OF: SOIL3724 AGEG3724 CLIM3724 PLTB3724 | ONE OF: SOIL3724 AGEG3724 CLIM3724 PPLG3724 | ONE OF: SOIL3724 AGEG3724 CLIM3724 PLTB3724 |
| YEAR | FOURTH | | | | | | | | FOURTH | | | | | | | |
| SEMESTER | FIRST | | | | | | | | SECOND | | | | | | | |
| COMPULSORY C3 | CROP4814 CROP4834 SCCS4808 SCCS4814 | CROP4814 CROP4834 SCCS4808 SCCS4814 | CROP4814 CROP4834 SCCS4808 SCCS4814 | CROP4814 CROP4834 SCCS4808 SCCS4814 | CROP4814 CROP4834 SCCS4808 SCCS4814 | CROP4814 CROP4834 SCCS4808 SCCS4814 FSCP4814 | CROP4814 CROP4834 SCCS4808 SCCS4814 | CROP4814 CROP4834 SCCS4808 SCCS4814 | CROP4824 CROP4844 SCCS4824 | CROP4824 CROP4844 SCCS4824 | CROP4824 CROP4844 SCCS4824 | CROP4824 CROP4844 SCCS4824 ENTO6884 | CROP4824 CROP4844 SCCS4824 | CROP4824 CROP4844 SCCS4824 PLTB4824 | CROP4824 CROP4844 SCCS4824 PPLG4824 | CROP4824 CROP4844 SCCS4824 PPLG4824 |
| ELECTIVES | ONE OF: CLIM4814 CLIM4834 | ONE OF: SOIL4814 SOIL4834 | ONE OF: AGEC4814 AGEC4834 | ONE OF: ANIP4814/ ANIP6814 ANIB4814 ANIN4836 | ONE OF: ENTO6854 | | ONE OF: PLTB4814 PLTB4834 PLTB4854 | PPLG4834 PPLG4814 | ONE OF: CLIM4824 CLIM4844 | ONE OF: SOIL4824 SOIL4844 | ONE OF: AGEC4824 AGEC4844 | ONE OF: ANIP4824 ANIB6824 ANIN4864 | | | | ONE OF: PPLG4824 PPLG4844 |

11.4.2.3 AGRICULTURAL SCIENCES FIELD OF INTEREST 3: SOIL SCIENCE 54412, 54413, 54411, 54451, 54436, 54442

| LEARNING PROGRAMMES IN BACHELOR OF AGRICULTURAL SCIENCES IN SOIL SCIENCE FIELD OF INTEREST 3 | | | | | | | | | | | | |
|---|---|---|---|---|--|--|--|---|--|---|---|---|
| Learning programmes in the Soil Science as main field of interest offer 6 options with a combination of Soil Science as a major for specialisation in the fourth year and a minor from either one of Agrometeorology, Agronomy, Agricultural Economic, Agricultural Engineering, Grassland Science or Plant Pathology. Each student registers for all the compulsory modules (row C1, C2, C3, | | | | | | | C4) during the four years of study and combines it with all the compulsory modules for the minor. If a student wants to register for the Agricultural Economics minor two extra modules for the first year are required. | | | | | |
| LEARNING PROGRAMME | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| SPECIALISATION | Soil Science Agrometeorology | Soil Science Agronomy | Soil Science Agricultural economics | Soil Science Grassland Science | Soil Science Agricultural Engineering | Soil Science Plant Pathology | Soil Science Agrometeorology | Soil Science Agronomy | Soil Science Agricultural economics | Soil Science Grassland Science | Soil Science Agricultural Engineering | Soil Science Plant Pathology |
| NEW CODE | 54412 | 54413 | 54411 | 54436 | 54462 | 54442 | 54412 | 54413 | 54411 | 54436 | 54462 | 54442 |
| OLD CODE | | | | | | | | | | | | |
| YEAR | FIRST | | | | | | FIRST | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C1 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 AGEC1514 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | AGEC1514 BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 AGEC1624 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1643 CHEM1644 SCCS1624 ANIG1624 | AGEC1624 BLGY1643 CHEM1644 SCCS1624 ANIG1624 |
| REQUIRED *if NBT < 65% | CSIL1511 UFS101 *EALN1508 or AGAN1508 | | | | | | CSIL1521 | | | | | |
| YEAR | SECOND | | | | | | SECOND | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C2 | CROP2614 SOIL2614 CLIM2614 | CROP2614 SOIL2614 CLIM2614 | CROP2614 SOIL2614 AGEC2614 | SOIL2614 CLIM2614 GRAS2614 | CROP2614 SOIL2614 CLIM2614 | CROP2614 SOIL2614 CLIM2614 | CROP2624 SOIL2624 CLIM2624 | CROP2624 SOIL2624 CLIM2624 | CROP2624 SOIL2624 AGEC2624 | CROP2624 SOIL2624 CLIM2624 | CROP2624 SOIL2624 AGEC2624 | CROP2624 SOIL2624 PPLG2624 |
| ELECTIVES | ONE OF: BOCH2614 GRAS2614 | ONE OF: BOCH2614 GRAS2614 | ONE OF: BOCH2614 CLIM2614 GRAS2614 | ONE OF: BOCH2614 GRAS2614 ANIG2614 | ONE OF: BOCH2614 GRAS2614 | ONE OF: BOCH2614 GRAS2614 PLTB2613 | ONE OF: AGEG2624 PLTB2623 PPLG2624 | ONE OF: AGEG2624 PLTB2623 PPLG2624 | ONE OF: AGEG2624 CLIM2624 PLTB2623 PPLG2624 | ONE OF: AGEG2624 CLIM2624 PLTB2623 PPLG2624 | ONE OF: AGEG2624 CLIM2624 PLTB2623 PPLG2624 | ONE OF: AGEG2624 CLIM2624 PLTB2623 PPLG2624 |
| YEAR | THIRD | | | | | | THIRD | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C3 | SOIL3714 CLIM3714 CROP3714 | SOIL3714 CROP3714 CLIM3714 | SOIL3714 AGEC3714 | SOIL3714 GRAS3714 CROP3714 | CROP3714 SOIL3714 AGEC3714 | SOIL3714 PPLG3714 CROP3714 | SOIL3724 CLIM3724 CROP3724 | SOIL3724 CROP3724 CLIM3724 | SOIL3724 AGEC3724 | SOIL3724 GRAS3724 | CROP3724 SOIL3724 AGEC3724 | SOIL3724 PPLG3724 CROP3724 |
| ELECTIVES | ONE OF: AGEG3714 GRAS3714 | ONE OF: AGEG3714 GRAS3714 | ONE OF: CROP3714 CLIM3714 ONE OF: AGEG3714 GRAS3714 | ONE OF: AGEG3714 CLIM3714 | ONE OF: CLIM3714 GRAS3714 | ONE OF: CROP3714 CLIM3714 PLTB3714 AGEG3714 | ONE OF: CROP3724 PLTB3724 PPLG3724 GRAS3724 | ONE OF: AGEG3724 PLTB3724 PPLG3724 GRAS3724 | ONE OF: CROP3724 CLIM3724 ONE OF: AGEG3724 PLTB3724 PPLG3724 GRAS3724 | ONE OF: CROP3724 CLIM3724 PLTB3724 PPLG3724 GRAS3724 | ONE OF: CROP3724 CLIM3724 PLTB3724 PPLG3724 GRAS3724 | ONE OF: CROP3724 CLIM3724 PLTB3724 PPLG3724 GRAS3724 |
| YEAR | FOURTH | | | | | | FOURTH | | | | | |
| SEMESTER | FIRST | | | | | | SECOND | | | | | |
| COMPULSORY C4 | SCCS4808 SCCS4814 SOIL4814 SOIL4834 ONE OF: CLIM4814 CLIM4834 | SCCS4808 SCCS4814 SOIL4814 SOIL4834 ONE OF: CROP4814 CROP4834 | SCCS4808 SCCS4814 SOIL4814 SOIL4834 ONE OF: AGEC4814 AGEC4834 | SCCS4808 SCCS4814 SOIL4814 SOIL4834 ONE OF: GRAS4814 GRAS4834 | SCCS4808 SCCS4814 CROP4834 SOIL4814 AGEC4814 | SCCS4808 SCCS4814 SOIL4814 SOIL4834 PPLG4834 | SCCS4824 SOIL4824 SOIL4844 ONE OF: CLIM4824 CLIM4844 | SCCS4824 SOIL4824 SOIL4844 ONE OF: CROP4824 | SCCS4824 SOIL4824 SOIL4844 ONE OF: AGEC4824 AGEC4844 | SCCS4824 SOIL4824 SOIL4844 ONE OF: GRAS4824 GRAS4844 | SCCS4824 CROP4824 AGEC4824 | SCCS4824 SOIL4824 SOIL4844 ONE OF: PPLG4824 PPLG4844 |

11.4.2.4 AGRICULTURAL SCIENCES FIELD OF INTEREST 4: ANIMAL, WILDLIFE AND GRASSLAND SCIENCES 51536, 53615, 51511, 53644

| LEARNING PROGRAMMES IN BACHELOR OF AGRICULTURAL SCIENCES IN THE ANIMAL, WILDLIFE AND GRASSLAND SCIENCES FIELD OF INTEREST 4 | | | | | | | | |
|--|--|--|---|---|---|---|---|--|
| Learning programmes in the Animal, Wildlife and Grassland Sciences FIELD OF INTEREST offers FOUR options with a combination of either Animal or Wildlife and Grassland Sciences as a major for specialisation in the fourth year and a minor from either one of them or Agricultural Economics and Soil Science to offer until third year level. Each student registers for all the compulsory modules (row C1, C2, C3, C4) during the four years of study and combines it with all the compulsory modules | | | | | for the minor: Animal Sciences, Agricultural Economics, Soil Sciences or Wildlife and Grassland Sciences. All the compulsory modules for the minor is required. Students must register for sufficient modules (supportive electives) to obtain at least 120 credits for each of the first and the second year of study. | | | |
| DISCIPLINE | ANIMAL & GRASSLAND SCIENCES | GRASSLAND & ANIMAL SCIENCES | ANIMAL SCIENCES & AGRICULTURAL ECONOMICS | GRASSLAND & SOIL SCIENCES | ANIMAL & GRASSLAND SCIENCES | GRASSLAND & ANIMAL SCIENCES | ANIMAL SCIENCES & AGRICULTURAL ECONOMICS | GRASSLAND & SOIL SCIENCES |
| CODE | 51536 | 53615 | 51511 | 53644 | 51536 | 53615 | 51511 | 53644 |
| YEAR | FIRST | | | | FIRST | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY C1 | BLGY1513 CHEM1514 PHYS1534 MATM1534 AGEC1514 | BLGY1513 CHEM1514 PHYS1534 MATM1534 AGEC1514 | BLGY1513 CHEM1514 PHYS1534 MATM1534 AGEC1514 | BLGY1513 CHEM1514 PHYS1534 MATM1534 AGEC1514 | BLGY1623 BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1623 BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1623 BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1623 BLGY1643 CHEM1644 SCCS1624 ANIG1624 |
| REQUIRED *if NBT < 65% | CSIL1511 UFS101 *EALN1508 or AGAN1508 | | | | CSIL1521 | | | |
| YEAR | SECOND | | | | SECOND | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY C2 | ANIG2614 BOCH2614 AGEC2614 GRAS2614 | GRAS2614 SOIL2614 CLIM2614 ANIG2614 AGEC2614 | ANIG2614 BOCH2614 AGEC2614 ONE OF AGEC3714 AGEC3734 | GRAS2614 SOIL2614 CLIM2614 ONE OF CROP2614 BOCH2614 ANIG2614 | ANIG2624 ANIB2624 STSB1624 ONE OF: AGEC1624 AGEC2624 | ANIG2624 STSB1624 SOIL2624 ONE OF: AGEC1624 AGEC2624 | STSB1624 AGEC1624 AGEC2624 ANIB2624 | SOIL2624 AGEC2624 ONE OF CROP2624 ZLGY2626 ONE OF AGEC1624 AGEC2624 |
| YEAR | THIRD | | | | THIRD | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY C3 | ANIP3714 ANIB3714 ANIN3734 GRAS3714 | GRAS3714 ANIP3714 SOIL3714 ANIG3714 | ANIP3714 ANIB3714 ANIN3734 ONE OF AGEC3714 AGEC3734 | GRAS3714 SOIL3714 CLIM3714 ONE OF CROP3714 ANIG3714 | ANIP3724 ANIB3724 ANIN3744 GRAS3724 DATA3722 | GRAS3724 DATA3722 ANIP3724 SOIL3724 ONE OF VWW364 ANIG3724 | DATA3722 ANIB3724 ANIN3744 ANIP3724 ONE OF AGEC3744 AGEC3724 | SOIL3724 DATA3722 GRAS3724 TWO OF CROP3724 ANIG3724 CLIM3724 |
| YEAR | FOURTH | | | | FOURTH | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY C4 | ANIP4814 ANIB4814 ANIN4836 ANIG4805/4803 | ANIP4814 GRAS4814 GRAS4834 ANIG4805/4803 | ANIP4814 ANIB4814 ANIN4836 ANIG4805/4803 | GRAS4814 GRAS4834 ANIG4805/4803 ONE OF SOIL4814 SOIL4834 | ANIP4824 ANIB6824 ANIN4864 | GRAS4824 GRAS4844 ANIP4824 | ANIP4824 ANIB6824 ANIN4864 | GRAS4844 GRAS4824 ONE OF SOIL4824 SOIL4844 |

11.4.2.5. AGRICULTURAL SCIENCES FIELD OF INTEREST 5: FOOD SCIENCES 52913, 52915, 52918, 52921, 52939

LEARNING PROGRAMMES IN BACHELOR OF AGRICULTURAL SCIENCES IN THE FOOD SCIENCES FIELDS OF INTEREST 5

Learning programmes in the **Food Science** FIELD OF INTEREST offer FOUR options with a combination of **Food Science** as a major for specialisation in the fourth year and a minor from either fields of interest of Agronomy, Animal Sciences, Biochemistry, Chemistry or Microbiology. Each student selects at least a major from Food Science and registers for all the compulsory modules

(row C1, C2, C3, C4) the four years of study and combines it with all the compulsory modules for the minor. All the compulsory modules for the minors are required. Students must register for sufficient modules (supportive electives) to obtain at least 120 credits for each of the first and the second year of study.

| DISCIPLINE | FOOD SCIENCE & AGRONOMY | FOOD & ANIMAL SCIENCES | FOOD SCIENCE & BIOCHEMISTRY | FOOD SCIENCE & CHEMISTRY | FOOD SCIENCE & MICROBIOLOGY | FOOD SCIENCE & AGRONOMY | FOOD & ANIMAL SCIENCES | FOOD SCIENCE & BIOCHEMISTRY | FOOD SCIENCE & CHEMISTRY | FOOD SCIENCE & MICROBIOLOGY |
|---------------------------|--|--|--|--|--|--|--|--|--|--|
| OLD CODE | 5327 | 5463 | 5348 | 5350 | 5349 | 5327 | 5463 | 5348 | 5350 | 5349 |
| NEW CODE | 52913 | 52915 | 52919 | 52921 | 52939 | 52913 | 52915 | 52919 | 52921 | 52939 |
| YEAR | FIRST | | | | | FIRST | | | | |
| SEMESTER | FIRST | | | | | SECOND | | | | |
| COMPULSORY C1 | BLGY1513 CHEM1514 PHYS1534 MATM1534 AGEC1514 | BLGY1513 CHEM1514 PHYS1534 MATM1534 AGEC1514 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1683 BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1683 BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1683 BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1683 BLGY1643 CHEM1624 SCCS1624 ANIG1624 MATM1544 | BLGY1683 BLGY1643 CHEM1644 SCCS1624 ANIG1624 |
| REQUIRED *if NBT < 65% | CSIL1511 UFS101 *EALN1508 or AGAN1508 | | | | | CSIL1521 | | | | |
| YEAR | SECOND | | | | | SECOND | | | | |
| SEMESTER | FIRST | | | | | SECOND | | | | |
| COMPULSORY C2 | BOCH2614 MCBP2616 CROP2614 FSCC2612 FSCI2612 | BOCH2614 MCBP2616 ANIG2614 FSCC2612 FSCI2612 | BOCB2616 MCBP2616 FSCC2612 FSCI2612 | BOCH2614 CHEM2614 CHEM2632 MCBH2614 FSCC2612 FSCI2612 | BOCB2616 MCBP2616: FSCC2612 FSCI2612 | CROP2624 FSCC2622 FSCS2624 EBUS1624 | FSCC2622 FSCS2624 ANIG2624 ONE OF: ANIB2624 AGEC1624 EBUS2664 | BOCE2626 IQMQ2622 FSCC2622 FSCS2624 | FSCC2622 FSCS2624 CHEM2624 CHEM2642 | FSCC2622 FSCS2624 MCBP2626 IQMQ2622 BOCE2626 |
| YEAR | THIRD | | | | | THIRD | | | | |
| SEMESTER | FIRST | | | | | SECOND | | | | |
| COMPULSORY C3 | CROP3714 FSCA3714 FSCI3714 EHRM1514 EBUS1614 | FSCA3714 FSCI3714 ANIP3714 ONE OF: EHRM1514 ANIN3734 | FSCA3714 FSCI3714 BOCM3714 BOCE3714 | FSCA3714 FSCI3714 CHEM3714 CHEM3734 | FSCA3714 FSCI3714 MCBG3714 ONE OF: BOCM3714 MKB334 | FSCP3724 FSCB3724 CROP3724 DATA3722 EBUS2624 | FSCP3724 FSCB3724 ANIP3724 DATA3722 ANIN3744 | FSCP3724 FSCB3724 BOCP3724 BOCS3724 | FSCP3724 FSCB3724 CHEM3724 CHEM3744 | FSCP3724 FSCB3724 MCBM3724 MCBP3724 |
| YEAR | FOURTH | | | | | FOURTH | | | | |
| SEMESTER | FIRST | | | | | SECOND | | | | |
| COMPULSORY C4 | FSCP4814 FSCE4814 FSCD4814 FSCM4814 FSCR4808 FSCL4806 | FSCP4814 FSCE4814 FSCD4814 FSCM4814 FSCR4808 FSCL4806 | FSCP4814 FSCE4814 FSCD4814 FSCM4814 FSCR4808 FSCL4806 | FSCP4814 FSCE4814 FSCD4814 FSCM4814 FSCR4808 FSCL4806 | FSCP4814 FSCE4814 FSCD4814 FSCM4814 FSCR4808 FSCL4806 | FSCG4826 | FSCG4826 | FSCG4826 | FSCG4826 | FSCG4826 |

11.4.2.6 AGRICULTURAL SCIENCES FIELD OF INTEREST 6: PLANT BREEDING AND PLANT PATHOLOGY 54113, 54136, 54142, 54213, 54241

| LEARNING PROGRAMMES IN BACHELOR OF AGRICULTURAL SCIENCES IN PLANT BREEDING AND PLANT PATHOLOGY FIELD OF INTEREST 6 | | | | | | | | |
|--|--|--|--|--|---|--|--|--|
| Learning programmes in PLANT BREEDING AND PLANT PATHOLOGY FIELD OF INTEREST offer FOUR options with a combination of either PLANT BREEDING AND PLANT PATHOLOGY as a major for specialisation in the fourth year and a minor from either one of the PLANT BREEDING and one of the two fields of interest or from Grassland and Agronomy to offer until third-year level. Each student selects at least a major from PLANT BREEDING AND PLANT PATHOLOGY and registers | | | | | for all the compulsory modules (row C1, C2, C3, and C4) for the four years of study and combines them with all the compulsory modules for the minor: Agronomy. All the compulsory modules for the minor are required. Students must register for sufficient modules (supportive electives) to obtain at least 120 credits for each of the first and the second year of study. | | | |
| DISCIPLINE | PLANT BREEDING & PLANT PATHOLOGY | PLANT PATHOLOGY & AGRONOMY/PLANT BREEDING | PLANT BREEDING & GRASSLAND SCIENCES | PLANT BREEDING & AGRONOMY | PLANT BREEDING & PLANT PATHOLOGY | PLANT PATHOLOGY & AGRONOMY/PLANT BREEDING | PLANT BREEDING & GRASSLAND SCIENCES | PLANT BREEDING & AGRONOMY |
| OLD CODE | 5346 | 5347 | | | 5346 | 5347 | | |
| CODE | 54142 | 54241 | 54136 | 54113 | 54142 | 54241 | 54136 | 54113 |
| YEAR | FIRST | | | | FIRST | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1513 CHEM1514 PHYS1534 MATM1534 | BLGY1623 BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1623 BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1623 BLGY1643 CHEM1644 SCCS1624 ANIG1624 | BLGY1623 BLGY1643 CHEM1644 SCCS1624 ANIG1624 |
| C1 | | | | | | | | |
| REQUIRED | CSIL1511 UFS101 *EALN1508 or AGAN1508 | | | | CSIL1521 | | | |
| *if NBT < 65% | | | | | | | | |
| YEAR | SECOND | | | | SECOND | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY | BTNY2616 SOIL2614 MCBP2616 PLTB2613 BTNY2602 | CROP2614 SOIL2614 MCBP2616 PLTB2613 | BTNY2616 SOIL2614 GRAS2614 PLTB2613 | BTNY2616 SOIL2614 CROP2614 PLTB2613 | BTNY2626 PLTB2623 PPLG2624 ANIB2624 | CROP2624 PLTB2623 ANIB2624 PPLG2624 | BTNY2626 PLTB2623 ANIB2624 | CROP2624 BTNY2626 PLTB2623 ANIB2624 |
| C2 | | | | | | | | |
| ELECTIVES | | | BOCH2614 ENTO2616 CLIM2614 ANIG2614 BTNY2602 | BOCH2614 ENTO2616 CLIM2614 BTNY2602 | | | PPLG2624 CLIM2624 | |
| YEAR | THIRD | | | | THIRD | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY | PLTB3714 PPLG3714 PPLG3734 SOIL3714 | PLTB3714 PPLG3714 PPLG3734 CROP3714 | GRAS3714 PLTB3714 BTNY3754 | CROP3714 PLTB3714 BTNY3754 | PLTB3724 PLTB3744 PPLG3744 PPLG3724 | PLTB3724 PPLG3724 PPLG3744 CROP3724 | GRAS3724 BTNY3744 PLTB3724 PLTB3744 | CROP3724 BTNY3744 PLTB3724 PLTB3744 |
| C3 | | | | | | | | |
| ELECTIVES | | | SOIL3714 CLIM3714 PPLG3714 | PPLG3714 SOIL3714 CLIM3714 | | | | |
| YEAR | FOURTH | | | | FOURTH | | | |
| SEMESTER | FIRST | | | | SECOND | | | |
| COMPULSORY | PLTB4814 PLTB4834 PLTB4854 PLTB4808 PLTB4806 | PLTB4854 PPLG4834 PPLG4806 PPLG4808 | PLTB4814 PLTB4834 PLTB4854 PLTB4808 PLTB4806 | PLTB4814 PLTB4834 PLTB4854 PLTB4808 PLTB4806 | PLTB4824 | PPLG4824 PPLG4844 | PLTB4824 | PLTB4824 |
| C4 | | | | | | | | |

11.5 LEARNING PROGRAMMES FOR POSTGRADUATE DIPLOMAS

11.5.1 ADVANCED UNIVERSITY DIPLOMA IN DISASTER MANAGEMENT 5201

The Advanced University Diploma in Disaster Management contains 120 credits and is presented in a minimum period of one year plus another year. The Dean may, however, give special permission that another additional year be granted to complete the qualification. It is the prerequisite to the Master's Degree in Disaster Management.

The programme consists of eight compulsory subjects and a field visit in one of the subjects. The programme requires practical assignments to be completed by candidates and submitted at predetermined dates. Assignments will be marked and graded by the lecturers, who will give candidates feedback in a written format and also orally during contact sessions. Assignments will be part of a continual evaluation process. Apart from the assignments, a formal examination evaluation (written) will take place at the end of each semester, normally during June and November.

| First Semester | | Second Semester | |
|----------------|---|-----------------|---|
| DIM601 | Research Methodology 15 | DIM605 | Disaster Risk Management 15 |
| DIM602 | Hazards and Disaster Management 15 | DIM606 | Information Technology in Disaster Management 15 |
| DIM603 | Strategic Disaster Management 15 | DIM607 | Public Health 15 |
| DIM604 | Disaster Management principles and practices 15 | DIM608 | Management of natural and human-made disasters 15 |

11.6 LEARNING PROGRAMMES FOR BACHELOR HONOURS DEGREES (NQF LEVEL 8)

11.6.1 BACHELOR OF ARCHITECTURE HONOURS 45314 (4567)

The Bachelor of Architecture Honours [BArchHons] is a full-time postgraduate degree by coursework and involves lectures, projects, and continuous evaluation. The purpose of the qualification is to educate candidates who may register for the degree Master of Architecture (Professional) that will enable successful candidates to register as "Candidate Architect" with the South African Council for the Architectural Profession in terms of the provisions of the Architectural Profession Act 44 of 2000. The degree BArch provides access to the Magister Architecturae (Professional) degree.

The evaluations and examinations for the degree BArchHons are recognised by the minister concerned in terms of the provisions of the Architectural Profession Act (Act 44 of 2000). Training experience after completion of the BArchHons degree will be controlled by

the conditions of the South African Council for the Architectural Profession. The registrar of this Council will provide information in this regard.

| YEAR | FIRST | SECOND |
|------------|---|-------------------------------|
| COMPULSORY | DESN6800 Design CONS6808 Building Science HURB6804 History of the Environment RARC6808 Research in Theory of Architecture EOKR6804 Property economics | |
| | DMET6812 Design methodology | RMET6822 Research methodology |

11.6.2 BACHELOR OF AGRICULTURE HONOURS 45352, 45362, 45375

BACHELOR OF AGRICULTURE HONOURS

The aims of this degree are:

- to give the student the opportunity to do in-depth specialisation of his/her choice to broaden his/her knowledge with respect to agriculture, rural development and agricultural management;
- to prepare the student for further postgraduate study;
- to lead the student in independent study of the main subject or field of specialisation; and
- to develop, through the Honours degree in Agricultural Management, the student's managerial skills in a variety of functional areas in agricultural enterprise management and development and the management of agricultural businesses.

A minimum of 120 credits must be obtained over the year and the department will announce the starting dates for classes.

BACHELOR OF AGRICULTURE HONOURS MAJORING IN MANAGEMENT

| | Agricultural Management | Irrigation Management | Wildlife Management |
|----------|--|--|--|
| CODE | 45352 | 45362 | 45375 |
| OLD CODE | 5531 | 5532 | 5533 |
| CREDITS | 120 credits | 120 credits | 120 credits |
| | AGMA6824 AGMA6814 AGMA6834 AGMA6844 AGMA6854 AGMA6864 AGMA6884 AGMA6808 | AGMA6876 IRRI6808 IRRI6816 IRRI6826 IRRI6846 | AGMA6876 WDMT6816 WDMT6846 WDMT6826 WDMT6808 |

BACHELOR OF AGRICULTURE HONOURS MAJORING IN AGRICULTURAL ECONOMICS

| Students must register for eight modules of which AGEC6814 and AGEC6808 are compulsory. The student must choose a field and successfully complete the three prescribed modules plus three other Honours modules. This degree is awarded in the following fields: | | | | |
|---|--|-------------------------------------|-----------------|------------------------------------|
| Agribusiness Management | Agricultural Marketing and International Trade | Agricultural Policy and Development | Farm Management | Resource and Environment Economics |
| 5517 | | | | |
| AGEC6814 | AGEC6814 | AGEC6814 | AGEC6814 | AGEC6814 |
| AGEC6808 | AGEC6808 | AGEC6808 | AGEC6808 | AGEC6808 |
| AGBS6824 | AGEC6894 | AGEC6824 | AGEC6894 | AGEC6864 |
| AGEC6894 | AGEC6844 | AGEC6844 | AGEC6864 | AGEM6824 |
| AGEC6884 | AGEC6884 | AGEC6864 | AGEC6884 | AGEM6844 |
| Plus three other postgraduate modules | | | | |
| AGEC6834 | AGBS6824 | AGBS6824 | AGBS6824 | AGBS6824 |
| AGMA6834 | AGEC6834 | AGEC6834 | AGEC6834 | AGEC6834 |
| AGEC6824 | AGMA6834 | AGMA6834 | AGMA6834 | AGMA6834 |
| AGEC6844 | AGMA6824 | AGMA6824 | AGMA6824 | AGMA6824 |
| AGEC6864 | AGEC6824 | AGEC6894 | AGEC6824 | AGEC6894 |
| AGEM6824 | AGEC6864 | AGEC6824 | AGEC6844 | AGEC6824 |
| AGEM6844 | AGEM6824 | AGEC6884 | AGEM6824 | AGEC6844 |
| | AGEM6844 | AGEM6824 | AGEM6844 | AGEC6884 |
| | | AGEM6844 | | |

- An ability to interrogate multiple sources of knowledge in an area of specialisation, and to evaluate knowledge and processes of knowledge production.
- An understanding of the complexities and uncertainties of selecting, applying or transferring appropriate standard procedures, processes or techniques to unfamiliar problems in a specialised field, discipline or practice.
- An ability to critically review information gathering, evaluation and management processes in specialised contexts in order to develop creative responses to problems and issues.
- An ability to present and communicate academic, professional or occupational ideas and texts effectively to a range of audiences, offering creative insights, rigorous interpretations and solutions to problems and issues appropriate to the context.

A candidate must register for the compulsory research modules of 36 credits and do research on an approved topic in consultation with the Head of the Department. More modules must be selected from the possible electives to obtain at least 120 credits.

| FIRST | SECOND |
|-------------------|----------|
| COMPULSORY | |
| CNSC4809 | |
| CNFD4808 | |
| NUTE6808 | |
| CNSC4814 | CNSC4824 |
| CNSC4834 | CNSC4844 |
| CNST4814 | CNST4824 |
| CNST4834 | CNST4844 |
| CNST4853 | CNST4864 |

11.6.3 BACHELOR OF SCIENCE HONOURS IN HOME ECONOMICS 45323

To obtain Honours Degree a minimum study period of one year is required. The composition of the student's curriculum and optional courses will be determined at the beginning of each year in consultation with the Head of the Department. A minimum of 120 credits must be presented. The Head of the Department determines how the modules must be distributed over the year and when the department will announce the starting dates for classes. After completing the Honours learning programmes the graduates will possess the following skills:

- Knowledge of and engagement in an area at the forefront of a field, discipline or practice.
- An understanding of the theories, research methodologies, methods and techniques relevant to the field, discipline or practice; and an understanding of how to apply this knowledge in a particular context.

11.6.4 BACHELOR OF SPATIAL PLANNING HONOURS 45345 (4543)

After completing the programme, the graduates will possess the following skills:

- A thorough knowledge of the aims and purpose of urban and regional planning as well as planning theory, urban planning theory, regional planning theory, philosophy and ethics.
- The ability to practically apply theory in urban and regional planning projects e.g. the capacity to analyse issues from a theoretical and/or empirical perspective and to recommend suitable alternatives.
- The ability to apply and understand economics for planners, socio-cultural aspects in planning and environmental planning; and link these to the everyday tasks and activities of urban and regional planners.

- The capacity to communicate clearly and logically, write good planning and research reports and debate these with stakeholders.

A minimum of 140 credits must be presented for the BHonsSP programme. To obtain the Honours in Spatial Planning a minimum study period of one year is required. Residential and Compact Learning can be conducted full-time over 12 months or 24 months part-time or in block weeks where attendance take place in 4-5 block weeks in a year. Compact learning students must attend compulsory workshop weeks at the department for the duration of the programme at times as determined by the Academic Departmental Head. Students who register as full-time or part-time will also be expected to attend some classes, sessions, guest lectures, field trips, site visits, tours, tests and examinations during the block weeks. During classes, lectures, tutorials, practicals and discussions will take place. Assignments will be done and tests and examinations may also be written during the block weeks.

The Head of the Department determines how the modules must be distributed over the years of study and in all programmes (full-time, part-time and compact learning). The modules may be spread over an additional year if a student does not have the necessary academic background.

This degree does not enable registration at the South African Council for Planners (SACPLAN).

| | |
|---------------------------------------|---|
| Full-time | Compulsory semester modules: URRE6814 / URRE6824 URSC6814 / URSC6824 URLM6814 / URLM6824 UREP6814 / UREP6824 |
| | Compulsory year modules: URR6805 URUT6804 URPT6804 URB6806 |
| Compact Learning and Part-Time | Year 1 Compulsory semester modules: URRE6814 / URRE6824 URSC6814 / URSC6824 URLM6814 / URLM6824 UREP6814 / UREP6824 |
| | Year 2 Compulsory year modules: URR6805 URUT6804 URPT6804 URB6806 |

11.6.5 BACHELOR OF SCIENCE HONOURS

11.6.5.1 BACHELOR OF SCIENCE HONOURS MAJORING IN AGRICULTURAL ECONOMICS 45011

Students must register for **eight** modules of which AGE6814 and AGE6808 are compulsory. The student must choose a field and successfully complete the three prescribed modules plus three other Honours modules. This degree is awarded in the following fields:

| Agribusiness Management | Agricultural Marketing and International Trade | Agricultural Policy and Development | Farm Management | Resource and Environment Economics |
|--|---|--|---|---|
| 5517 | | | | |
| AGE6814 AGE6808 | AGE6814 AGE6808 | AGE6814 AGE6808 | AGE6814 AGE6808 | AGE6814 AGE6808 |
| AGBS6824 AGE6894 AGE6884 | AGE6894 AGE6844 AGE6884 | AGE6824 AGE6844 AGE6864 | AGE6894 AGE6864 AGE6884 | AGE6864 AGEM6824 AGEM6844 |
| Plus three other postgraduate modules of which one is an appropriate Honours modules | | | | |
| AGE6834 AGE6854 AGE6824 AGE6844 AGE6864 AGEM6824 AGEM6844 | AGBS6824 AGE6834 AGE6854 AGE6874 AGE6824 AGE6864 AGEM6824 AGEM6844 | AGBS6824 AGE6834 AGE6854 AGE6874 AGE6894 AGE6824 AGE6884 AGEM6824 AGEM6844 | AGBS6824 AGE6834 AGE6854 AGE6874 AGE6824 AGE6844 AGEM6824 AGEM6844 | AGBS6824 AGE6834 AGE6854 AGE6874 AGE6894 AGE6824 AGE6844 AGE6884 |

11.6.5.2 BACHELOR OF SCIENCE HONOURS 45018, 45019, 45027, 45039, 45049, 45057, 45031, 45020, 45040, 45070, 45042, 45041

| Students must register for all compulsory modules plus enough others to obtain at least 120 credits. This degree is awarded in the following fields: * Modules not always presented | | | | | | | | | |
|---|---|---|---|---|---|--|--|--|---|
| DISCIPLINE | BEHAVIOURAL GENETICS | BIOCHEMISTRY | BOTANY | ENTOMOLOGY | ENVIRONMENTAL REHABILITATION | FOOD SCIENCES | FORENSIC SCIENCES | | |
| OLD CODE | | 4511 | 4530 | 4517 | | 45029 | Forensic Sciences | Forensic Genetics | Forensic Chemistry |
| NEW CODE | 45018 | 45019 | 45020 | 45027 | 45057 | | 45030 | 45078 | 45077 |
| COMPULSORY | GENE6816 GENE6808 *GENH6814/GENH6824 *GENB6814/GENB6824 *GENE6834/GENE6844 | BOCT6814 BOCO6822 BOCE6814 BOCM6814 BOCL6826 BOCR6828 | PLTB6854 BNTY6806 BNTY6808 | ENTO6814 ENTO6822 ENTO6832 ENTO6842 ENTO6808 | SCCS6814 ENRH6824 ENRH6806 ENRH6808 | FSCB6816 FSCC6816 FSCD6826 FSCM6826 FSCF6826 FSCP6826 FSCF6846 FSCR6808 FSCL6806 | FORS6816 FORS6808 *FORS6814/FORS6824 *FORS6834/FORS6844 *FORS6854/FORS6864 *FORC6814/FORC6824 | FORG6816 FORG6808 *FORG6814/FORG6824 *FORG6834/FORG6844 *FORG6854/FORG6864 *GENP6814/GENP6824 | FORS6816 *FORS6814/FORS6824 *FORS6834/FORS6844 *FORS6854/FORS6864 CHEM6874/CHEM6884 |
| ELECTIVES | GENE6834/GENE6844 GENS6814/GENS6824 GENP6814/GENP6824 (16 credits from Psychology or Zoology. Dependant on acceptance by respective departments.) *Module codes will depend on semester of presentation - to be determined by the department. | BOCB6824 BOCS6824 One 16-credit NQF Level 8 module from any other discipline in the biological field of interest. Subject to approval PD/ADH. | BTNY6814 BTNY6824 BTNY6834 BTNY6844 BTNY6854 BTNY6864 BTNY6874 BTNY6884 One 16-credit NQF Level 8 module from any other discipline in the biological field of interest. Subject to approval PD/ADH. | ENTO6854 ENTO6864 ENTO6874 ENTO6884 ENTO6894 One 16-credit NQF Level 8 module from any other discipline in the biological field of interest. Subject to approval PD/ADH. | SOIL6814 SOIL6824 BTNY6814 BTNY6864 One 16-credit NQF Level 8 module from any other discipline in the biological field of interest. Subject to approval PD/ADH. | | *FORS6874/FORS6884 *Module codes will depend on semester of presentation - to be determined by the department | *FORG6874/FORG6884 *Module codes will depend on semester of presentation - to be determined by the department | FORS6814 FORS6824 FORS6834 FORS6874* *Module codes will depend on semester of presentation - to be determined by the department |

| DISCIPLINE | GENETICS | LIMNOLOGY | MICROBIOLOGY | PLANT BREEDING | PLANT HEALTH ECOLOGY | PLANT PATHOLOGY | WILDLIFE | ZOOLOGY |
|------------|---|---|--|---|---|---|---|---|
| CODE | 4520 | | 4526 | | | | | 4516 |
| COMPULSORY | 45031 GENE6816 GENE6808 GENE6814/GENE6824 | 45066 LIMH6808 LIMH6814 LIMH6856 LIMH6824 LIMH6834 LIMH6844 | 45039 MCBT6814 MCBO6822 MCBL6826 MCBR6828 | 45041 PLTB6814 PLTB6824 PLTB6834 PLTB6854 PLTB6806 PLTB6808 | 45070 PPLG6806 PPLG6808 PLTB6854 SOIL6844 PPLG6824 | 45042 PLTB6854 PPLG6806 PPLG6808 PPLG6844 PPLG6824 PPLG6834 | 45075 WILD6816 WILD6836 WILD6826 WILD6808 | 45049 ZLGY6814 ZLGY6822 ZLGY6832 ZLGY6842 ZLGY6808 |
| ELECTIVES | GENC6814/GENC6824 GENM6814/GENM6824 GENP6814/GENP6824 GENS6814/GENS6824 GENH6814/GENH6824 GENB6814/GENB6824 GENE6834/GENE6844 FORG6854/FORG6864 One 16-credit NQF Level 8 module from any other discipline in the biological field of interest. Subject to approval PD/ADH. | Subject to approval PD/ADH. | MCBD6824/ MCB6834 MCBP6814/ MCBP6844 MCBM6814 MCBC6814 One 16-credit NQF Level 8 module from any other discipline in the biological field of interest. Subject to approval PD/ADH. | One 16-credit NQF Level 8 module from any other discipline in the biological field of interest. Subject to approval PD/ADH. | CROP6814 CROP6844 ENTO6854 ENTO6884 CLIM6824 PPLG6834 One 16-credit NQF Level 8 module from any other discipline in the biological field of interest. Subject to approval PD/ADH. | One 16-credit NQF Level 8 module from any other discipline in the biological field of interest. Subject to approval PD/ADH. | One 16-credit NQF Level 8 module from any other discipline in the biological field of interest. Subject to approval PD/ADH. | ZLGY6834 ZLGY6854 ZLGY6864 ZLGY6874 ZLGY6884 ZLGY6894 One 16-credit NQF Level 8 module from any other discipline in the biological field of interest. Subject to approval PD/ADH. |

11.6.5.3 BACHELOR OF SCIENCE HONOURS MAJORING IN CONSTRUCTION MANAGEMENT 45024, 45043

| LEARNING PROGRAMMES FOR CONSTRUCTION MANAGEMENT HONOURS (PROGRAM CODE: M4091) | | | | | |
|---|--|--|----|--|------------|
| Learning programmes: Each student select all the compulsory modules (row C1/C2) from the prescribed discipline for all three study years. Students must select sufficient module credits from the electives (E) to obtain the credits for each year of study as indicated. | | | | | |
| YEAR CREDITS: 132 | FIRST CREDITS 68 | FIRST CREDITS 132 | | SECOND CREDITS 64 | SECOND |
| MODE New CODE | DISTANCE 45024 | RESIDENTAL 45024 | | DISTANCE 45024 | RESIDENTAL |
| Old CODE | 4542 | 4540 | | 4542 | |
| COMPULSORY C1 | PQMD6804 (PQM404) PDED6802 (PDE404) CSCD6803 (CSC404) CFND6804 (CFN404) | PQMR6804(POB404) PDER6802(END404) CSCR6803(KWE404) CFNR6804(KOF404) PPRR6802(BPK404) MCIR6808(BKI402) INPR6803(GIP402) APMR6803(APM404) | C2 | PPRD6802 (PPR404) MCID6808 (MCI402) INPD6803 (INP402) APMD6803 (APM404) | |
| ELECTIVE | ONE OF PVPD6804 (PVP404) PFMD6804 (PFM404) | ONE OF PVPR6804 (EWP404) PFMR6804 (EFB404) | | | |

BACHELOR OF SCIENCE HONOURS MAJORING IN QUANTITY SURVEYING 45024, 45043 OPEN LEARNING

| LEARNING PROGRAMMES FOR QUANTITY SURVEYING HONOURS (PROGRAM CODE: M4091) | | | | | |
|--|--|--|----|--|------------|
| Learning programme: Each student select all the compulsory modules (row C1/C2) from the prescribed discipline for all three study years. Students must select sufficient module credits from the electives (E) to obtain the credits for each year of study as indicated. | | | | | |
| YEAR CREDITS: 132 | FIRST CREDITS 68 | FIRST CREDITS 132 | | SECOND CREDITS 64 | SECOND |
| MODE New CODE | DISTANCE 45043 | RESIDENTAL 45043 | | DISTANCE 45043 | RESIDENTAL |
| Old CODE | 4541 | 4539 | | 4541 | |
| COMPULSORYC1 | DQFD6804 (DQF404) PDED6802 (PDE404) CSCD6803 (CSC404) COED6804 (COE404) | DQFR6804 (BKF404) PDER6802 (END404) CSCR6803 (KWE404) COER6804 (BOE404) PPRR6802 (BPK404) MCIR6808 (BK1402) INPR6803 (GIP402) APMR6803 (GPB404) | C2 | PPRD6802 (PPR404) MCID6808 (MCI402) INPD6803 (INP402) APMD6803 (APM404) | |
| ELECTIVE | ONE OF PVPD6804 (PVP404) PFMD6804 (PFM404) CFND6804 (CFN404) | ONE OF PVPR6804 (EWP404) PFMR6804 (EFB404) CFNR6804 (KOF404) | | | |

11.6.5.4 BACHELOR OF SCIENCE HONOURS LEARNING PROGRAMMES IN PHYSICAL AND CHEMICAL SCIENCES

| DISCIPLINE | CHEMISTRY | PHYSICS | ASTROPHYSICS | AGROMETEOROLOGY (from 2016) | ENGINEERING SUBJECTS |
|-------------------|--|---|--|--|--|
| CODE | 45021 | 45040 | 45017 | 45012 | 45026 |
| COMPULSORY | CHEM6814 CHEM6834 CHEM6854 CHEM6874 CHEM6824 CHEM6844 CHEM6884 CHEM6864 | PHYS6808/PHYS6814/PHYS6824* PHYS6834/PHYS6844* PHYS6894* PHYS6854/PHYS6864 PHYS6874/PHYS6884* PHYI6874/PHYI6884* PHYI6814/PHYI6824 PHYE6814/PHYE6824 PHYI6834/PHYI6844* PHYI6864/PHYI6854* PHYE6834/PHYE6844* PHYA6814/PHYA6824/PHYA6824 PHYA6834/PHYA6844 PHYA6854/PHYA6864 * Students wanting to do an MSc in Surface Physics are strongly recommended to register for these courses. | Note that students will only be allowed to this programme if they comply with the extra admission requirements related to undergraduate astrophysics modules specified by the ADH. PHYA6808 PHYA6814/PHYA6824/24 PHYA6854/64 PHYA6874/84 | COMPULSORY SCCS6814 SCCS6824 SCCS6808 Two from CLIM6814 CLIM6824 CLIM6834 CLIM6844 An appropriate Honours module from another discipline. | No Honours registered and students registering for the Bachelor of Science's Engineering Sciences cannot transfer directly to a Bachelor of Honours degree; they would have to do at least three physics modules to make the migration possible. |
| ELECTIVES | | | PHYS6814/24 PHYS6834/44 PHYE6814/24 PHYS6854/64 PHYI6814/24 PHYE6834/44 PHYA6834/44 PHYC6814/24 PHYC6834/44 PHYI6874/84 | | |

11.6.5.5 BACHELOR OF SCIENCE HONOURS IN AGRICULTURE

HONOURS LEARNINGPROGRAMMES 55012, 55013, 55015, 55019, 45027, 45039, 45049 – BScHons (Agriculture) – Study code 5515, 5516, 5518,5521, 5523,5524

The objectives of the study for this degree are:

- (a) to deepen and extend the student's knowledge in subjects of their choice in the context of research and extension;
- (b) to prepare the student for further post-graduate study;
- (c) to develop independent study capability in the student;
- (d) to train the student how to collect, compile, collate, interpret and report subject literature and the effective communication thereof.

A minimum of 120 credits must be obtained over the year and the department will announce the starting dates for classes. All modules are 20 NQF level 7 credits

| DISCIPLINE | AGROMETEOROLOGY | AGRONOMY | | | ANIMAL SCIENCE | | | GRASSLAND SCIENCE | SOIL SCIENCE | IRRIGATION SCIENCE |
|----------------|--|---|--|--|--|--|--|--|--|--|
| OLD CODE | 5518 | 5515 | | | 5521 | | | 5523 | 5516 | 5524 |
| NEW CODE | 55012 | 55013 | | | 55015 | | | 55036 | 55044 | 55083 |
| SUB DISCIPLINE | | Crop Production | Vegetable production | Fruit production | Animal Breeding | Animal Nutrition | Animal Physiology | | | |
| COMPULSORY | LWR601 LWR602 LWR693 LWR695 | AGR693 AGR695 AGR615 AGR625 AGR635 AGR645 | HRT693 HRT695 AGR615 AGR635 HRT625 HRT645 | HRT693 HRT695 AGR615 AGR635 HRT625 HRT645 | VKD693 VKD695 DTL601 DTL602 DTL603 | VKD693 VKD695 DVL601 DVL602 DVL603 DVL604 | VKD693 VKD695 DAF601 DAF602 DAF603 | WDK693 WDK695 WDK601 WDK602 WDK603 WDK604 | GKD615 GKD625 GKD635 GKD645 GKD693 GKD695 | AGR635 BSB693 BSB695 GKD635 LWR601 |
| ELECTIVES | TWO OF LWR603 LWR604 LWR605 LWR606 One of these elective modules may be replaced by an appropriate honours module from another discipline. The second choice of modules must be done in consultation with the Departmental Chairperson | One of the modules, except AGR693, AGR695, HRT693 and HRT695, may be replaced by an appropriate honours module from another discipline, in consultation with the Departmental Chairperson | | | ONE OF DAF601, DAF602, DAF603 | | ONE OF DTL601 DTL602 DTL603 | | | ONE OF AGR615 GKD645 LWR605 |

11.6.5.6 BACHELOR OF SCIENCE HONOURS LEARNING PROGRAMMES IN COMPUTER AND INFORMATION SYSTEM SCIENCES AND MATHEMATICAL SCIENCES

| DISCIPLINE | COMPUTER INFORMATION SYSTEMS | ACTUARIAL SCIENCE | MATHEMATICS AND APPLIED MATHEMATICS | | MATHEMATICAL STATISTICS | STATISTICS |
|------------|---|--|--|---|--|--|
| CODE | 4532 | 4546 | 4537 | | | |
| NEW CODE | 45022 | 45010 | 45038 | | 45037 | 45046 |
| CREDITS | All compulsory modules plus enough others to obtain at least 120 credits | | | | | |
| COMPULSORY | CSIS6806 CSIP6853/CSIP6863 CSIP6873/CSIP6883 CSIS6813 | ACSL6815 ACSF6806 ACSR6800 STSP6815 | MATM6818/MATM6828 | | STSR6808 STSB6815 STSP6815 STSM6825 | STSR6808 STSS6815 STSC6815 |
| | At least five modules from | At least 30 additional credits at NQF Level 8 | | | At least TWO modules from | At least THREE modules from |
| | CSIN6813/CSIN6823 CSID6833/CSID6843 CSII6813/CSII6823 CSIC6833/CSIC6843 CSIM6813/CSIM6823 CSIM6833/CSIM6843 CSIC6813/CSIC6823 CSID6853/CSID6863 CSIE6813/CSIE6823 CSIC6853/CSIC6863 CSID6813/CSID6823 CSIP6833/CSIP6843 CSIE6833/CSIE6843 CSIE6853/CSIE6863 CSIE6873/CSIE6883 CSII6833/CSII6843 CSIN6833/CSIN6843 CSIP6813/CSIP6823 CSII6853/CSII6863 | ACSG6800 STSB6815 STSA6815 STSC6815 STSX6815 STSR6825 STSM6825 STSP6825 STSE6825 STSX6825 | MATM6816/MATM6826 MATA6814/MATA6824 MATB6814/MATB6824 MATC6814/MATC6824 MATD6814/MATD6824 MATE6814/MATE6824 MATF6814/MATF6824 MATG6814/MATG6824 MATH6814/MATH6824 MATI6814/MATI6824 MATJ6814/MATJ6824 MATK6814/MATK6824 MATL6814/MATL6824 MATM6814/MATM6824 | MATN6814/MATN6824 MATO6814/MATO6824 MATP6814/MATP6824 MATQ6814/MATQ6824 MATR6814/MATR6824 MATS6814/MATS6824 MATT6814/MATT6824 MATU6814/MATU6824 MATV6814/MATV6824 MATW6814/MATW6824 MATX6814/MATX6824 MATY6814/MATY6824 MATZ6814/MATZ6824 MATZ6834/MATZ6834 MATZ6854/MATZ6864 | STSS6815 STSF6815 STSA6815 STSC6815 STSX6815 STSF6825 STSR6825 STSF6865 STSP6825 STSE6825 STSX6825 | STSB6815 STSM6815 STSP6815 STSF6815 STSA6815 STSF6825 STSF6825 STSF6865 STSP6825 STSE6825 STSX6825 |

11.6.5.7 HONOURS LEARNING PROGRAMMES IN GEOSCIENCES

| | | |
|-------------------|--|--|
| | | GEOGRAPHY |
| | | 45033 |
| SEMESTER | | |
| COMPULSORY | | GEOF6816 GEOR6808 |
| ELECTIVES | | GEOH6816 GEOP6816 GISC6816 GEOH6836 |
| SEMESTER | | |
| COMPULSORY | | |
| ELECTIVES | | ENVG6826 GISC3704 ENVG6846 GISR6826 One 16-credit NQF Level 8 module from any other related field. |

HONOURS LEARNING PROGRAMMES IN GEOLOGY (45035, 45028, 45032) AND GEOHYDROLOGY (45034)

The study starts either in January or July on a date as determined by the Department of Geology and Geohydrology respectively. Modules marked by an asterisk (*) contain a research component. These courses start on a date as determined by the subject head. Each module must be independently passed. Students compile their own Curricula in consultation with the ADH and the programme director to obtain at least 60 credits per semester.

| | GEOLOGY | ENVIRONMENTAL GEOLOGY | GEOCHEMISTRY | GEOHYDROLOGY | | GEOLOGY | ENVIRONMENTAL GEOLOGY | GEOCHEMISTRY | GEOHYDROLOGY |
|-------------------|---|-------------------------------------|-------------------------------------|----------------------------------|--|--|--|---|----------------------------------|
| | FIRST SEMESTER | | | | | SECOND SEMESTER | | | |
| COMPULSORY | GLGY6816* | GLGY6816* GLGY6823* GLGY6873* | GLGY6816* GLGY6823* GLGY6873* | GEOH6815 GEOH6835 GEOH6855 | | | | GLGY6846* | GEOH6865 GEOH6845 GEOH6835 |
| ELECTIVES | GLGY6836* GLGY6853* GLGY6856* GLGY6873* GLGY6893* | GLGY6893* | GLGY6893* | | | GLGY6823* GLGY6826* GLGY6843* GLGY6846* GLGY6863* GLGY6883* | GLGY6823* GLGY6826* GLGY6843* GLGY6846* GLGY6863* GLGY6883* | GLGY6823* GLGY6826* GLGY6843* GLGY6863* GLGY6883* | |

11.7 MASTER DEGREES (NQF LEVEL 9)

11.7.1 MASTER OF ARCHITECTURE 47414 (4711), 47314(4710)

| MASTER OF ARCHITECTURE 47314(4710) | MASTER OF ARCHITECTURE 47414 (4711) |
|--|---|
| LEARNING PROGRAMMES FOR MASTER OF ARCHITECTURE (For extended research) <ul style="list-style-type: none"> The minimum term of this study is two years and a total of 180 credits are allocated for this degree. A candidate must do research on an approved topic in consultation with the head of the department, for at least one year in preparation for a dissertation that shall be submitted as the only requirement for the degree. | LEARNING PROGRAMMES FOR MASTER OF ARCHITECTURE (PROFESSIONAL) (For professional registration) <p>The Magister Architecturae (Professional) is a one year full-time Master's degree by coursework and involves lectures, projects, and an investigated design thesis with an advanced design project. The purpose of the qualification is to educate candidates who may register as "Candidate Architect" with the South African Council for the Architectural Profession in terms of the provisions of the Architectural Profession Act 44 of 2000.</p> <p>The evaluations and examinations for the degree MArch(Professional) are recognised by the minister concerned in terms of the provisions of the Architectural Profession Act (Act 44 of 2000). Training experience after completion of the degree MArch(Professional) will be controlled by the conditions of the South African Council for the Architectural Profession. The registrar of this Council will provide information in this regard.</p> |
| YEAR 1 | YEAR 1 |
| ARCH8900 | DDIS7900 CONS7908 ATRE7904 BPKR7914 PARC7904 |

11.7.2 MASTER OF AGRICULTURE 57352, 57362, 57375 (5725)

| LEARNING PROGRAMMES FOR MASTER OF AGRICULTURE | | |
|---|------------------------------|----------------------------|
| The aims of this degree study are: <ol style="list-style-type: none"> to present specialised post-degree agricultural management training; to guide the candidate in such a way that he/she will be able to successfully integrate, communicate and apply the principles, concepts and knowledge of agricultural and management science; and to enhance applicable research skills in order to enable the candidate to qualify as a specialist in his/her field. A candidate who registers for the MAgriC degree and presents a dissertation (180 credits), must use one of the following codes: | | |
| RESEARCH | | |
| 57352 | 57362 | 57375 |
| AGRICULTURAL MANAGEMENT | IRRIGATION MANAGEMENT | WILDLIFE MANAGEMENT |
| AGMA8900 | IRMA8900 | WDMT8900 |

11.7.3 MASTER OF DISASTER MANAGEMENT 47425(5703)

| LEARNING PROGRAMMES FOR MASTER OF DISASTER MANAGEMENT | | | | |
|---|-------------------------|-----------------------------|---|---------|
| The main aim of the programme is to provide disaster management practitioners, or those who may have future disaster management responsibilities, training in a holistic approach towards disaster management to enable them to manage all kinds of disasters by implementing proactive disaster management strategies in terms of relevant legislation, policies and directives, and effectively co-ordinate relief and recovery programs. | | | The degree can be offered over a minimum period of one year (full time). Students will be allowed to take the degree over a two-year period (part time) by registering for fewer subjects per year. Prospective part-time candidates need to clarify their part-time studies with the Director of DiMTEC. Students need to obtain 120 credits | |
| Compulsory | | Electives (choose any two): | | |
| DIM791 | Extended research essay | Code | Subject | Credits |
| | | DIM702 | Political Strategic Planning | 16 |
| | | DIM703 | Information Management | 16 |
| | | DIM704 | Ethnic and Cultural Conduct | 16 |
| | | DIM705 | Management of media relations | 16 |
| | | DIM706 | Environmental risk and impact assessment | 16 |
| | | DIM707 | Disaster vulnerability and risk assessment | 16 |
| | | DIM708 | Water-related disaster risk management | 16 |

11.7.4 MASTER OF ENVIRONMENTAL MANAGEMENT 47456(4790; 4775; 4776)

| LEARNING PROGRAMMES FOR MASTER OF ENVIRONMENTAL MANAGEMENT (MEM) | | | | |
|--|--|---|-------------------|--------------------------------------|
| Upon completion of the degree the candidate should be able to: | | <ul style="list-style-type: none"> Demonstrate the ability to conduct research on an environmental management-related problem. <p>The programme offered is interdisciplinary and will be presented by the Faculty of Natural and Agricultural Sciences in conjunction with the Faculties of Health Sciences, Economic and Management Sciences, Law and Humanities under the control of the Centre for Environmental Management and a Management Committee. It is offered over a minimum period of two years with a total of 240 credits</p> <p>At the start of each semester candidates will spend two weeks at the campus in Bloemfontein where the introductory lectures, tutorials, practicals and discussions will take place and the work programme finalised. In the second semester of the first year, students will have to come to the campus for an additional week in October/November.</p> | | |
| Master of Environmental Management by dissertation (4775) | | Structured Master of Environmental Management, register under the code (4776) | | |
| Year 1 and Year 2 | | Semester 1 | Semester 2 | Semester 3 |
| ENMT8900 | | MOB707 | MOB708 | MOB791 |
| | | | | One of MOB741 MOB743 MOB745 |

11.7.5 MASTER OF SUSTAINABLE AGRICULTURE 47447(5710)

MASTER OF SUSTAINABLE AGRICULTURE 47447 (5710)

LEARNING UNITS FOR MASTER OF SUSTAINABLE AGRICULTURE (MSA)

The aim of this multi- and interdisciplinary postgraduate degree in Sustainable Agriculture is to provide skills, knowledge and training in the development, maintenance and management of sustainable agricultural production practices. Such practices involves the sustainable utilization of natural, economical and human resources for the production of sufficient and safe food and fibre products in all climatic conditions of Southern Africa, but particularly in the high-risk semi-arid regions. Applicable research will stimulate analytical and critical thought.

Modules are presented with limited contact by means of residential sessions and submission of assignments. Modules will be offered as semester modules whilst the research component will be a year module. Modules have 24 credits each and the research component 72 credits.

This programme consists of three compulsory modules, three optional modules and an extended research project consisting of a module on research methodology, a complete research project

proposal and a final research report in the form of a mini-dissertation, script or article publishable in a peer reviewed journal.

Evaluation (written or oral) is done by means of the submitted assignments of each module as well as a formal examination per module. The mini-dissertation, script or article is conducted and examined under the supervision of a supervisor or supervision committee. External assessment is done by an separate appointed panel of experts

The program is presented part time over a minimum period of two years, during which 240 credits must be earned.

| Elective modules: Three modules (24 credits each) from any focus area | | | | |
|---|------------|--|--|------------|
| Focus Area | Semester 1 | Semester 2 | Semester 3 | Semester 4 |
| Compulsory | SASA7900 | | SARM7906 ONE OF: SASC7900 SAMD7900 SAPA7900 | |
| SOCIAL | SAEX7916 | | | |
| ECOLOGICAL | SAUR7916 | | | |
| ECONOMICAL | | SAFM7926 | | |
| SOCIAL | | ONE OF: SARD7926 SACT7926 SAPM7926 | | |
| ECOLOGICAL | | | ONE OF: SATN7916 SACP7916 SALP7916 | |
| ECONOMICAL | | | ONE OF: SAVA7916 SAAM7916 SASM7916 | |

11.7.6 MASTER OF LAND AND PROPERTY DEVELOPMENT MANAGEMENT 47464 (4798)

| LEARNING PROGRAMMES FOR MLPM (PROGRAM CODE: M4091) | | | | | |
|--|---|---|----|---|--|
| Learning programmes: Each student selects the field of interest, between Project Management or Valuation and include all the compulsory modules (row C1/C2) from the prescribed discipline for the study years. Students must select sufficient modules and credits as indicated at each field of interest from the electives (E) to obtain at least 180 credits for the degree programme. | | | | | |
| YEAR | FIRST | FIRST | | SECOND | SECOND |
| MODE | PROJECT MANAGEMENT | VALUATION | | PROJECT MANAGEMENT | VALUATION |
| New CODE | 47464 | 47464 | | 47464 | 47464 |
| Old CODE | 4798 | 4798 | | 4798 | 4798 |
| CREDITS | 84 | | | 96 | |
| COMPULSORY C1 | DPRP7902 TRBP7904 LSFP7902 AGEC7902 (LEK720) PPYC7901 BOEC7902 ENDC7902 (END704) ANDC7902 (END793) CCPC7901 CINC7901 INDR7902 | WILD7902(NLE793) URRP7902 (ISR702) SOIL7904 (GKD708) AGEM7902 (LEK793) PPYC7901 BOEC7902 ENDC7902 (END704) ANDC7902 (END793) CCPC7901 CINC7901 INDR7902 | C2 | IPMP7904 ENDR7900 AINC7901 (CIN793) | ENWV7904 ENDR7900 AINC7901 (CIN793) |
| ELECTIVE | | | | SELECT ANY 16 CREDITS URHS7904 (BEH704) URTD7902 (RBT702) URTP7902 (VVB702) URPM7902 (BGR704) URAP7902 (GSP702) URBP7902 (BSP702) URPT7904 (BTR704) | SELECT ANY 16 CREDITS URHS7904 (BEH 704) URTD7902 (RBT702) URTP7902 (VVB702) URPM7904 (BGR704) URAP7902 (GSP702) URBP7902 (BSP702) URPT7904 (BTR704) |

11.7.7 MASTER OF LAND AND PROPERTY DEVELOPMENT IN HOUSING 47363 (4763)

These learning programmes aim to:

(a) Provide the candidate with the opportunity to present evidence of advanced study and research characterised by intellectual independence and advanced knowledge of a specialisation area in the subject, as well as accurate evaluation of his/her own results and as well as that of others by production of a thesis, which places his/her research in broader context and which is capable of withstanding international intellectual scrutiny.

(b) Develop the candidate, who will be able to demonstrate knowledge and understanding of supervised planning and execution of a research project in the discipline. This project includes hypothesis formulation, collecting appropriate experimental materials, optimising techniques and procedures, data acquisition, analysis and interpretation of results, and writing of a dissertation according to a structured format and related literature.

A candidate must do research on an approved topic in consultation with the head of the department for at least two years, in preparation of a full dissertation.

YEAR 1+2

URHS8900

11.7.8 MASTER OF SCIENCES

These learning programmes aims at:

- (a) Providing the candidate with the opportunity to present evidence of advanced study and research characterised by intellectual independence and advanced knowledge of a specialisation area in the subject, as well as accurate evaluation of his/her own results and that of others by production of a thesis which places his/her research in broader context and which is capable of withstanding international intellectual scrutiny.
- (b) Developing the candidate in order to demonstrate knowledge and understanding of supervised planning and execution of a research project in the discipline. This project includes hypothesis formulation, collecting appropriate experimental materials, optimising techniques and procedures, data acquisition, analysis and interpretation of results, and writing of a dissertation according to a structured format and related literature.
- The minimum term of this study is 2 years and a total of 180 credits is allocated for this degree. The candidate may do a research Masters programme with a full dissertation or a structured Masters programme depending on the discipline for which they want to register.
- In cases where an MSc degree consists only of a dissertation, the programme code will start with 471 and in the case where the MSc degree consists of both course work and research the programme the code will start with 472.
- If the full dissertation option is followed the candidate must do research on an approved topic for at least two semesters, in consultation with the Academic Departmental Head, in preparation for a dissertation that shall be submitted as the only requirement for the degree. Candidates may be required to present at least one seminar/research report in each year in accordance with departmental rules.
- If the structured Master programme is all prescribed modules, a compulsory research essay must be completed. The topic for the research must be determined in consultation with the Academic Departmental Head. Candidates may be required to present at least one seminar/research report.

| STRUCTURED MASTERS | | | | | |
|-----------------------|---|---|---|---|--|
| | ASTROPHYSICS | COMPUTER INFORMATION SYSTEMS | MATHEMATICS OR APPLIED MATHEMATICS | | |
| PROGRAMME CODE | 47217 | 47222 | 47238 or 47216 | | |
| OLD CODE | 4792 | 4792 | 4792 | | |
| COMPULSORY | PHYA7900 PHYA7990 | CSIS7910 | MATM7970 | | |
| ELECTIVES | Candidates in the National Astrophysics and Space Science Programme (NASSP) must do an Extended research essay (ASTA8900) (100 credits) on an approved subject, in consultation with the Academic Departmental Head, after having already completed a theoretical course component (ASTA7900 – Astrophysics and Space Science) (80 credits) presented by the University of Cape Town (UCT) consisting of a total of 5 UCT weight points from the NASSP Master's programme (www.star.ac.za). An oral examination may be required which will be arranged with the candidate after the extended research essay has been submitted. | At least 60 Credits of CSIS7915/CSIS7925 CSIS7935/CSIS7945 CSIS7955/CSIS7965 CSIS7975/CSIS7985 | At least Four 24 credit modules | | |
| | | | MATA7916 MATB7916 MATC7916 MATCD7916 MATE7914/MATE7924 MATF7914/MATF7924 MATG7914/MATG7924 MATH7914/MATH7924 MATI7914/MATI7924 MATJ7914/MATJ7924 | MATK7914/MATK7924 MATL7914/MATL7924 MATM791/MATM7924 MATN7914/MATN7924 MATO7914/MATO7924 MATP7914/MATP7924 MATQ7914/MATQ7924 MATR7914/MATR7924 MATS7914/MATS7924 MATT7914/MATT7924 | MATU7914/MATU7924 MATV7914/MATV7924 MATW7914/MATW7924 MATX7914/MATX7924 MATY7914/MATY7924 MATZ7914/MATZ7924 MATZ7934/MATZ7944 MATZ7954/MATZ7964 One 24 credit module from another discipline |

| | MATHEMATICAL STATISTICS RISK ANALYSIS | | | MATHEMATICAL STATISTICS | | | STATISTICS | | ACTUARIAL SCIENCES | ACTUARIAL SCIENCES |
|----------------|---|----------|-----------|--|----------|----------|----------------------|----------|---|---|
| PROGRAMME CODE | 47274 (4973) | | | 47237 (4973) | | | 47246 (4973) | | 47210 (4973) If ACSI6800 is NOT completed | 47210 (4973) If ACSI6800 is completed |
| COMPULSORY | STSR7900 STSF7910 STSF7920 STSE7920 (If STSF6815, STSF6825, STSE6825 was not part of the honour degree else any other NQF LEVEL 9 STS MODULE) | | | STSR7900 STSS7910 STSE7920 | | | STSR7900 STSA7910 | | ACSR7900 ACSI6800 ONE OF ACSI7910 ACSI7910 ACSI7910 ACSI7910 ACSI7910 ACSI7910 | ACSR7900 TWO OF ACSI7910 ACSI7910 ACSI7910 ACSI7910 ACSI7910 |
| ELECTIVES | At least one of | | | At least four themes | | | At least four themes | | Enough to obtain 180 NQF 9 credits | Enough to obtain 180 NQF 9 credits |
| | STSB7910 | STSX7920 | STSP7920 | STSB7910 | STSF7920 | STSP7920 | STSB7910 | STSF7920 | | |
| | STSP7910 | STSR7910 | MATW7914/ | STSP7910 | STSR7910 | | STSP7910 | STSR7910 | | |
| | STSS7910 | STSF7940 | MATW7924 | STSF7910 | STSF7940 | | STSS7910 | STSF7940 | | |
| | STSA7910 | STSM7920 | EECO6816 | STSA7910 | STSM7920 | | STSF7910 | STSM7920 | | |
| | | | | STSX7920 | | | STSX7920 | STSE7920 | | |
| | A written examination paper on four themes from the following and a compulsory short dissertation on an approved topic, themes should be chosen such that the module content does not overlap with a successfully completed honours-level module, e.g. STSB7910 may not be chosen if STK611 was successfully completed. Themes are selected in consultation with the Academic Departmental Head | | | A written examination paper on four themes from the following and a compulsory short dissertation on an approved topic, themes should be chosen such that the module content does not overlap with a successfully completed honours-level module, e.g. STSB7910 may not be chosen if STK611 was successfully completed. Themes are selected in consultation with the Academic Departmental Head. | | | | | | |

| RESEARCH MASTERS 2 YEARS | | | | | | | | | | | |
|------------------------------|------|-------|----------|------------------------------|------|-------|-----------|----------------------------------|------|-------|----------|
| Actuarial Sciences | 4793 | 47110 | ACST8900 | Environmental Rehabilitation | 4792 | 47157 | ENRH8900 | Mathematical Statistics | 4792 | 47137 | STST8900 |
| Agricultural Economics | 4792 | 47111 | AGEC8900 | Food Science | 4792 | 47129 | FSCM8900 | Microbiology | 4792 | 47139 | MCBT8900 |
| Applied Mathematics | 4792 | 47116 | MATM8900 | Forensic Sciences | 4792 | 47130 | FORS8900 | Mathematics | 4792 | 47138 | MATM8900 |
| Agrometeorology | 4792 | 47112 | CLIM8900 | Forensic Chemistry | 4792 | 47177 | FORC8900 | Microbial Biotechnology | 4792 | 47167 | MBBT8900 |
| Astrophysics | 4792 | 47117 | PHYA8900 | Forensic Entomology | 4792 | 47130 | FORE8900 | Plant Health Ecology | 4792 | 47170 | PHEC8900 |
| | | | | Genetics Interdisciplinary | | 47130 | GENI8900 | | | | |
| Behavioural Genetics | 4792 | 47118 | GENB8900 | Forensic Genetics | 4792 | 47178 | FORwG8900 | Plant Breeding | 4792 | 47141 | PLTB8900 |
| Biochemistry | 4792 | 47119 | BOCM8900 | Forensic Interdisciplinary | 4792 | 47130 | FORI8900 | Plant Breeding Interdisciplinary | 4792 | 47100 | PLTI8900 |
| Botany | 4792 | 47120 | BNTY8900 | Genetics | 4792 | 47131 | GENE8900 | Plant Pathology | 4792 | 47142 | PPLG8900 |
| Chemistry | 4792 | 47121 | CHEM8900 | Geochemistry | 4792 | 47132 | GECE8900 | Physics | 4792 | 47140 | PHYS8900 |
| Computer Informatics Systems | 4792 | 47122 | CSIS8900 | Geography | 4792 | 47133 | GEOH8900 | Property Sciences | 4792 | 47172 | PROP8900 |
| Consumer Science | 4770 | 47123 | CNSC8900 | Geoinformatics | 4792 | 47160 | GEOI8900 | Quantity Surveying | 4720 | 47143 | DQFR8900 |
| Construction Management | 4780 | 47124 | PQMR8900 | Geology | 4792 | 47135 | GLGY8900 | Soil Sciences | 4792 | 47144 | SOIL8900 |
| Entomology | 4792 | 47127 | ENTO8900 | Geohydrology | 4792 | 47134 | GEHR8900 | Statistics | 4792 | 47146 | STST8900 |
| Environmental Geology | 4792 | 47128 | GLGY8900 | Grassland Sciences | 4792 | 47136 | GRAS8900 | Wildlife | 4792 | 47182 | WILD8900 |
| Environmental Management | 4792 | 47156 | ENMT8900 | Limnology | 4792 | 47166 | LIMG8900 | Zoology | 4792 | 47149 | ZLGY8900 |

| MASTER OF SCIENCE IN NANOSCIENCE | | | |
|----------------------------------|---|---|--|
| PROGRAMME CODE | 47269 (4793) | | |
| COMPULSORY | Study code 4719: This qualification forms part of the National Nanoscience Postgraduate Teaching Platform (NNPTP) and is offered in collaboration with the University of the Western Cape, the University of Nelson Mandela Metropole and the University of Johannesburg. Candidates are subjected to a selection process. The programme consists of a theoretical coursework component (80 Credits) and a research dissertation (100 Credits). | <p>a) Theoretical Coursework</p> <p>The coursework component is presented at the University of the Western Cape (UWC). NSCC7911 and NSMN7911 are compulsory. Candidates register for a major field of specialization (NSFC7911, NSFP7911 or NSTC7914) and the applicable Experimental Techniques module. To complete the theoretical coursework component candidates have to enrol for the two foundation courses that are not part of the major field of specialization. For example: Candidates opting for Advanced Nanophysics (NSAP7900) accordingly select Foundations of Nano-biomedical Sciences for non-biologists (NSTC7914) and Foundations of Nanochemistry for Non-chemists (NSCC7911). The coursework component incorporates the following modules:</p> | <p>NSCC7911 – Central Concepts in Nanoscience NSMN7911 – Management for Nanoscientists NSFB7911 – Foundations of Nano-biomedical sciences for Non-biologists NSFC7911 – Foundations of Nanochemistry for Non-chemists NSFP7911 – Foundations of Nanophysics for Non-physicists NSTC7914 – Experimental Techniques in Nanochemistry NSTP7914 – Experimental Techniques in Nanophysics NSAP7900 – Advanced Nanophysics NSRP7900 – Nanoscience Research Project</p> <p>(b) Research Project</p> <p><i>*Currently not available at the University of the Free State.</i></p> <p>On successful completion of the coursework component, candidates must do an approved research project (dissertation) (NSRP7900) (100 credits) in Nanoscience (in consultation with the Academic Departmental Head) at the University of the Free State.</p> |

11.7.9 MASTER OF SCIENCE IN AGRICULTURE 57112, 57113, 57115, 57136, 57141, 57142, 57144, 57146, 57148

| | |
|--|--|
| These learning programmes aim at: | <p>The minimum term of this study is 2 years and a total of 180 credits are allocated for this degree. Regulations: The candidate may do a research Masters programme with a full dissertation or a structured Masters programme depending on the discipline in which they want to register. In cases where an MSc degree consists only of a dissertation the programme code will start with 571 and in the case where the MSc degree consists of both course work and research the programme code will start with 592.</p> |
| <ul style="list-style-type: none"> providing the candidate with the opportunity to present evidence of advanced study and research characterised by intellectual independence and advanced knowledge of a specialisation area in the subject, as well as accurate evaluation of his/her own results and that of others by production of a thesis which places his/her research in broader context and which is capable of withstanding international intellectual scrutiny developing the candidate in order to demonstrate knowledge and understanding of supervised planning and execution of a research project in the discipline. This project includes hypothesis formulation, collecting appropriate experimental materials, optimising techniques and procedures, data acquisition, analysis and interpretation of results, and writing of a dissertation according to a structured format and related literature | <ul style="list-style-type: none"> If the full dissertation option is followed the candidate must do research on an approved topic for at least two semesters, in consultation with the Academic Departmental Head, in preparation for a dissertation that shall be submitted as the only requirement for the degree. Candidates may be required to present at least one seminar/research report in each year in accordance with departmental. DATA2614 and DATA 2624 must have been successfully completed or must be done concurrently. |

RESEARCH

| | | | | | | | | |
|-----------------|-------|----------|----------------------------------|-------|----------|-----------------|-------|----------|
| Agrometeorology | 57112 | CLIM8900 | Grassland Science | 57136 | GRAS8900 | Plant Pathology | 57142 | PPLG8900 |
| Agronomy | 57113 | CROP8900 | Plant Breeding | 57141 | PLTB8900 | Soil Science | 57144 | SOIL8900 |
| Animal Science | 57115 | ANIN8900 | Plant Breeding Interdisciplinary | 57100 | PLTI8900 | | | |

11.7.10 MASTER OF SCIENCE IN HOME ECONOMICS 47123

These learning programmes aims at:

- (a) providing the candidate with the opportunity to present evidence of advanced study and research characterised by intellectual independence and advanced knowledge of a specialisation area in the subject, as well as accurate evaluation of his/her own results and that of others by production of a thesis which places his/her research in broader context and which is capable of withstanding international intellectual scrutiny.
- (b) developing the candidate in order to demonstrate knowledge and understanding of supervised planning and execution of a research project in the discipline. This project includes hypothesis formulation, collecting appropriate experimental materials, optimising techniques and procedures, data acquisition, analysis and interpretation of results, and writing of a dissertation according to a structured format and related literature.

The minimum term of this study is 2 years and a total of 180 credits are allocated for this degree.

The candidate may do a research Masters programme with a full dissertation or a structured Masters programme depending on the discipline in which they want to register. In cases where an MSc degree consists only of a dissertation the programme code will start with 471 and in the case where the MSc degree consists of both course work and research the programme code will start with 472.

- If the full dissertation option is followed the candidate must do research on an approved topic for at least two semesters, in consultation with the Academic Departmental Head, in preparation for a dissertation that shall be submitted as the only requirement for the degree. Candidates may be required to present at least one seminar/research report in each year in accordance with departmental.

If the structured Master programme is all prescribe modules, a compulsory research essay must be completed. The topic for the research must be determined in consultation with the Academic Departmental Head. Candidates may be required to present at least one seminar/research report.

| RESEARCH | STRUCTURED |
|--|---|
| MASTER OF SCIENCE IN HOME ECONOMICS MSc (Home Economics) 47123 (4771) | MASTER OF SCIENCE IN HOME ECONOMICS MSc(Home Economics) 47223 (4772) (Only available as from 2017 if approval is granted) |
| CNCS8900 | CNCS7900 CNCS7913 CNCS7923 CNCS7919 CNCS7929 |

11.7.11 MASTER OF SCIENCE IN CONSTRUCTION MANAGEMENT

MASTER OF SCIENCE IN QUANTITY SURVEYING 47124, 47143, 47172

MSc (Construction Management and Quantity Surveying) is an advanced academic degree focused on specialisation in the construction science to prepare candidates to act as leaders in the profession and serve as specialists in different fields or in the science of quantity surveying.

These learning programmes aims at:

- (c) providing the candidate with the opportunity to present evidence of advanced study and research characterised by intellectual independence and advanced knowledge of a specialisation area in the subject, as well as accurate evaluation of his/her own results and that of others by production of a thesis which places his/her research in broader context and which is capable of withstanding international intellectual scrutiny.

- (d) developing the candidate in order to demonstrate knowledge and understanding of supervised planning and execution of a research project in the discipline. This project includes hypothesis formulation, collecting appropriate experimental materials, optimising techniques and procedures, data acquisition, analysis and interpretation of results, and writing of a dissertation according to a structured format and related literature.

A candidate must do research on an approved topic in consultation with the head of the department for at least two years, in preparation of a full dissertation that shall be submitted as the only requirement for the degree.

| | |
|--|--|
| MASTER OF SCIENCE IN CONSTRUCTION MANAGEMENT 47124 (4780) | MASTER OF SCIENCE IN QUANTITY SURVEYING MSc (QS) 47143 (4720) |
| YEAR 1 + YEAR 2 | YEAR 1 + YEAR 2 |
| PQMR8900 | DQFR8900 |

11.7.12 MASTER OF URBAN AND REGIONAL PLANNING (Research) MURP 47348 (4764)

LEARNING PROGRAMMES FOR MASTER'S DEGREE IN URBAN AND REGIONAL PLANNING (Research)

These learning programmes aim to:

- (a) Provide the candidate with the opportunity to present evidence of advanced study and research characterised by intellectual independence and advanced knowledge of a specialisation area in the subject, as well as accurate evaluation of his/her own results and as well as that of others by production of a thesis which places his/her research in broader context and which is capable of withstanding international intellectual scrutiny.
- (b) Develop the candidate to be able to demonstrate knowledge and understanding of supervised planning and execution of a research project in the discipline. This project includes hypothesis

formulation, collecting appropriate experimental materials, optimising techniques and procedures, data acquisition, analysis and interpretation of results, and writing of a dissertation according to a structured format and related literature.

A candidate must do research on an approved topic in consultation with the head of the department for at least two years, in preparation of a full dissertation that shall be submitted as the only requirement for the degree.

This degree does not enable registration at the South African Council for Planners (SACPLAN).

Compulsory major modules

YEAR 1+2

URMD8900

Through the publication (or acceptance for publication) of an article in an accredited journal. The article must be accepted by an accredited journal as a scientific article before it will be accepted as an alternative to the full dissertation.

11.7.14 MASTER OF URBAN AND REGIONAL PLANNING (Professional) MURP 47448 (4762)

After completing the MURP programme, the graduates will obtain a professional degree and will possess the following skills:

- The capacity to complete practical urban and regional planning projects including spatial frameworks, development plans and layouts
- The capacity to analyse issues from a theoretical and/or empirical perspective and to recommend suitable alternatives
- The capacity to communicate clearly and logically, write good planning and research reports, and debate these with stakeholders
- The ability to critically evaluate information and theories and to apply relevant concepts from different disciplines in innovative approaches to planning issues

The period of this study can be:

- Full Time 12 months,
- Part Time 24 months or

- Compact learning- block sessions 24 months presented as 4 - 5 workshop weeks per year

The Head of the Department determines how the modules must be distributed over the years of study and in all programmes (Full time, Part time and Compact Learning). The modules may be spread over an additional year if a student does not have the necessary academic background. Compact learning students must attend compulsory workshop weeks at the department for the duration of the programme at times as determined by the Academic Departmental Head. During these workshop lectures, tutorials, practicals and discussions will take place. Assignments will be done and tests and examinations may also be written.

Students that register as full time or part time will also be expected to attend some classes, sessions, guest lectures, field trips, site visits, tours, tests and examinations during the block weeks.

A minimum of 204 credits must be presented for the MURP (Professional) programme.

After sufficient practical training the graduate will be able to register as Urban and Regional Planner at the South African Council for Planners (SACPLAN).

Compulsory major modules

| | |
|--------------------------------|--|
| Full time | Compulsory semester modules: URRM7914 / URRM7924 URPP7914 / URPP7924 URHS7913 / URHS7923 URDP7912 / URDP7922 |
| | Compulsory year modules: URRP7906 URUP7906 URGI7904 URMD7900 |
| Compact Learning and Part Time | Year 1 |
| | Compulsory semester modules: URRM7914 / URRM7924 URDP7912 / URDP7922 Compulsory year modules: URRP7906 URUP7906 |
| | Year 2 |
| | Compulsory semester modules: URPP7914 / URPP7924 URHS7913 / URHS7923 Compulsory year modules: URGI7904 URMD7900 |

11.8 DOCTOR OF SCIENCES DEGREES (NQF LEVEL 10)

11.8.1 DOCTOR OF ARCHITECTURE DArch (4910) 49014

This learning programme aims to:

- (a) Provide the opportunity for candidates who have already obtain a NQF Level 10 qualification and have contributed extensive publications of exceptional quality in the specific subject field or discipline over a considerable period of time:

Candidates can register for a Doctoral degree with specialisation in one of the following areas:

| | | |
|---------------------|-------|-----------------|
| Architecture | 49014 | ARCH9100 |
|---------------------|-------|-----------------|

11.8.2 DOCTOR OF PHILOSOPHY (PhD) 49111–49164 (4910, 5910)

This learning programme aims to:

- (a) Provide the candidate with the opportunity to prove her/his ability to plan and do research independently and to report the results.
- (b) Enable the candidate to make an original contribution to the discipline.

The minimum term of this study is three years and a total of 360 credits is allocated for this degree. The candidate must do research for at least four semesters on an approved topic selected in consultation with the departmental chair in preparation to complete the thesis (360 credits). The degree study period therefore lasts three years. The candidate will present at least one seminar/ research report in each year of study in accordance with departmental regulations.

Candidates can register for a PhD with specialisation in one of the following areas:

| Discipline | Old Code | New Code | Mod Code | Discipline | Old Code | New Code | Mod Code | Discipline | Old Code | New Code | Mod Code |
|------------------------------|-----------|----------|----------|----------------------------------|-----------|----------|----------|----------------------------------|-----------|----------|----------|
| Actuarial Sciences | 4910 | 49110 | ACST9100 | Environmental Management | 5910 | 49156 | ENMT9100 | Mathematical statistics | 4910 | 49137 | STST9000 |
| Agricultural Economics | 5910 | 49111 | AGEC9100 | Environmental Rehabilitation | 4910 | 49157 | ENRH9100 | Mathematics | 4910 | 49138 | MATM9100 |
| Agricultural Management | 4910 | 49152 | AGMN9100 | Food Science | 4910/5910 | 49129 | FSCD9100 | Microbiology | 4910 | 49139 | MCBT9100 |
| Agrometeorology | 4910/5910 | 49112 | CLIM9100 | Forensic Chemistry | 4910 | 49177 | FORC9100 | Microbial Biotechnology | 4910 | 49167 | MBBT9100 |
| Agronomy | 5910 | 49113 | CROP9100 | Forensic Entomology | 4910 | 49179 | FORE9100 | Mineral Resource Throughput | 4910 | 49168 | MRTM9100 |
| Architecture | 4910 | 49114 | ARCH9100 | Forensic Genetics | 4910 | 49178 | FORG9100 | Physics | 4910 | 49140 | PHYS9100 |
| Animal Science | 4910 | 49115 | ANIN9100 | Forensic Interdisciplinary | 4910 | 49181 | FORI9100 | Plant Breeding | 5910 | 49141 | PLTB9100 |
| Applied Mathematics | 4910 | 49116 | MATM9100 | Forensics Sciences | 4910 | 49130 | FORS9100 | Plant Breeding Interdisciplinary | 4910/5910 | 49183 | PLTI9100 |
| Astrophysics | 4910 | 49117 | PHYA9100 | Genetics | 4910 | 49131 | FORC9100 | Plant Health Ecology | 5910 | 49170 | PHEC9100 |
| Behavioural Genetics | 4910 | 49118 | GENB9100 | Genetics Interdisciplinary | 4910 | 49130 | GENI9100 | Plant Pathology | 4910 | 49142 | PPLG9100 |
| Biochemistry | 4910 | 49119 | BOCT9100 | Geochemistry | 4910 | 49132 | GECE9100 | Polymer Sciences | 4910 | 49171 | PLSC9100 |
| Botany | 4910 | 49120 | BTNY9100 | Geography | 4910 | 49133 | GEOH9100 | Property Sciences | 4910 | 49172 | DQFR9100 |
| Chemistry | 4910 | 49121 | CHEM9100 | Geohydrology | 4910 | 49134 | GEHR9100 | Quantity Surveying | 4910 | 49143 | QTSV9000 |
| Computer Informatics Systems | 4910 | 49122 | CSIS9100 | Geographical Information Systems | 4910 | 49160 | GEOI9100 | Sustainable Agriculture | 4910 | 49147 | SADR9100 |
| Consumer Sciences | 4910 | 49123 | CNSC9100 | Geology | 4910 | 49135 | GLGY9100 | Soil Science | 4910/5910 | 49144 | SOIL9100 |
| Construction Management | 4910 | 49124 | PQMR9100 | Grassland Science | 5910 | 49136 | GRAS9100 | Statistics | 4910 | 49146 | STST9100 |
| Disaster Management | 5910 | 49125 | DSMT9000 | Irrigation Management | 5910 | 49162 | ITMT9000 | Urban and Regional Planning | 4910 | 49148 | URPD9100 |
| Ecology | 4910 | 49152 | BIOG900 | Human Settlements | 4910 | 49163 | URHS9100 | Wildlife Science | 5910 | 49184 | WILD9100 |
| Entomology | 4910 | 49127 | ENTO9100 | Land and Property Development | 4910 | 49164 | URLM9100 | Wildlife Management | 5910 | 49175 | WLMT9100 |
| Environmental Geology | 4910 | 49128 | GLGE9100 | Limnology | 4910 | 49166 | LIMG9100 | Zoology | 4910 | 49149 | ZLGY9100 |

11.8.3 DOCTOR OF SCIENCE (DSc) 49011–49064

These learning programmes aims to:

- (a) Provide the opportunity for candidates who have already obtain a NQF Level 10 qualification and have contributed extensive publications of exceptional quality in the specific subject field or discipline over a considerable period of time:

Candidates can register for a Doctoral degree with specialisation in one of the following areas:

| Discipline | Old Code | New Code | Mod Code | Discipline | Old Code | New Code | Mod Code | Discipline | Old Code | New Code | Mod Code |
|------------------------------|-----------|----------|----------|----------------------------------|-----------|----------|----------|----------------------------------|-----------|----------|----------|
| Actuarial Sciences | 4900 | 49010 | ACST9100 | Environmental Management | 5900 | 49056 | ENMT9100 | Mathematical statistics | 4900 | 49037 | STST9000 |
| Agricultural Economics | 5900 | 49011 | AGEC9100 | Environmental Rehabilitation | 4900 | 49057 | ENRH9100 | Mathematics | 4900 | 49038 | MATM9100 |
| Agricultural Management | 4900 | 49052 | AGMN9100 | Food Science | 4900/5900 | 49029 | FSCD9100 | Microbiology | 4900 | 49039 | MCBT9100 |
| Agrometeorology | 4900/5900 | 49012 | CLIM9100 | Forensic Chemistry | 4900 | 49077 | FORC9100 | Microbial Biotechnology | 4900 | 49067 | MBBT9100 |
| Agronomy | 5900 | 49013 | CROP9100 | Forensic Entomology | 4900 | 49179 | FORE9100 | Physics | 4900 | 49040 | PHYS9100 |
| Animal Science | 5900 | 49015 | ANIN9100 | Forensic Genetics | 4900 | 49078 | FORG9100 | Plant Breeding | 5900 | 49041 | PLTB9100 |
| Applied Mathematics | 4900 | 49016 | MATM9100 | Forensic Interdisciplinary | 4900 | 49181 | FORI9100 | Plant Breeding Interdisciplinary | 5900 | 49083 | PLTI9100 |
| Astronomy | 4900 | 49017 | PHYA9100 | Forensics Sciences | 4900 | 49030 | FORS9100 | Plant Health Ecology | 5900 | 49070 | PHEC9100 |
| Behavioural Genetics | 4900 | 49018 | GENB9100 | Genetics | 4900 | 49031 | FORC9100 | Plant Pathology | 5900 | 49042 | PPLG9100 |
| Biochemistry | 4900 | 49019 | BOCD9100 | Genetics Interdisciplinary | 4900 | 49030 | GENI9100 | Polymer Sciences | 4900 | 49071 | PLSC9100 |
| Botany | 4900 | 49020 | BTNY9100 | Geochemistry | 4900 | 49032 | GECE9100 | Property Sciences | 4900 | 49072 | PROP9100 |
| Chemistry | 4900 | 49021 | CHEM9100 | Geography | 4900 | 49033 | GEOH9100 | Quantity Surveying | 4900 | 49043 | DQFR9100 |
| Computer Informatics Systems | 4900 | 49022 | CSIS9100 | Geohydrology | 4900 | 49034 | GEHR9100 | Soil Science | 4900/5900 | 49044 | SOIL9100 |
| Consumer Sciences | 4900 | 49023 | CNSC9100 | Geographical Information Systems | 4900 | 49060 | GEOI9100 | Statistics | 4900 | 49046 | STST9100 |
| Construction Management | 4900 | 49024 | PQMR9100 | Geology | 4900 | 49035 | GLGY9100 | Wildlife Science | 5900 | 49084 | WILD9100 |
| Entomology | 4900 | 49027 | ENTO9100 | Grassland Science | 5900 | 49036 | GRAS9100 | Zoology | 4900 | 49049 | ZLGY9100 |
| Environmental Geology | 4900 | 49028 | GLGE9100 | Limnology | 4900 | 49066 | LIMG9100 | | | | |

MODULE LIST WITH PREREQUISITES PER DEPARTMENT

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|------------------------|--|----------|----------|---|
| Agricultural Economics | Agribusiness management | AGBS6824 | AGB605 | Selection BScHon |
| Agricultural Economics | Economic Management of Resources | AGEC1514 | LEK114 | NSC Math level 3 |
| Agricultural Economics | Agricultural finances | AGEC1624 | LEK124 | LEK114 |
| Agricultural Economics | Business functions for Agribusiness | AGEC1634 | LEK134 | NSC Math level 3 or MathsIIT 6 AP32 or MathsIIT 5 with MTDA1408 |
| Agricultural Economics | Farm planning and management | AGEC2614 | LEK214 | LEK114 |
| Agricultural Economics | Introduction to agricultural marketing | AGEC2624 | LEK224 | LEK114 |
| Agricultural Economics | Managerial economics | AGEC3714 | LEK314 | LEK114 |
| Agricultural Economics | Seminar in agricultural economics | AGEC3721 | LEK361 | None |
| Agricultural Economics | Resource economics | AGEC3724 | LEK324 | LEK114 |
| Agricultural Economics | Agribusiness management | AGEC3734 | LEK334 | LEK114 |
| Agricultural Economics | Agricultural policy and development | AGEC3744 | LEK344 | LEK114 |
| Agricultural Economics | Managerial economics | AGEC4814 | LEK414 | LEK114 |
| Agricultural Economics | Seminar in Agricultural Economics | AGEC4821 | LEK421 | LEK114 |
| Agricultural Economics | Resource economics | AGEC4824 | LEK424 | LEK114 |
| Agricultural Economics | Agribusiness management | AGEC4834 | LEK434 | LEK114 |
| Agricultural Economics | Agricultural policy and development | AGEC4844 | LEK444 | LEK114 |
| Agricultural Economics | Research Project in Agricultural Economics | AGEC6808 | LEK693 | Selection BSc Hon |
| Agricultural Economics | Quantitative techniques | AGEC6814 | LEK601 | Selection BSc Hon |
| Agricultural Economics | Agricultural policy | AGEC6824 | LEK606 | Selection BSc Hon |
| Agricultural Economics | Production and consumer economics | AGEC6834 | LEK602 | Selection BSc Hon |
| Agricultural Economics | International Agricultural Trade | AGEC6844 | LEK607 | Selection BSc Hon |
| Agricultural Economics | Operational research | AGEC6854 | LEK603 | Selection BSc Hon |
| Agricultural Economics | Agricultural development | AGEC6864 | LEK608 | Selection BSc Hon |
| Agricultural Economics | Agricultural econometrics | AGEC6874 | LEK604 | Selection BSc Hon |
| Agricultural Economics | Agricultural marketing and price analysis | AGEC6884 | LEK609 | Selection BSc Hon |
| Agricultural Economics | Agricultural financing | AGEC6894 | LEK605 | Selection BSc Hon |
| Agricultural Economics | Environmental Economics | AGEC7902 | LEK720 | MProp |
| Agricultural Economics | Agricultural Economics Dissertation | AGEC8900 | LEK 700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Agricultural Economics | Agricultural Economics Thesis | AGEC9100 | LEK900 | MSc Selection PhD or DSc, Permission from ADH |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|--|----------|----------|--|
| Agricultural Economics | Advanced resource and environmental economics | AGEM6824 | LEK610 | Selection BSc Hon |
| Agricultural Economics | Project planning and analysis | AGEM6844 | LEK611 | Selection BSc Hon |
| Agricultural Economics | Land Valuation and Business Plans | AGEN7902 | LEK793 | MProp |
| Agricultural Economics | Business management and Entrepreneurship | AGMA3714 | LBB314 | None |
| Agricultural Economics | Innovation Management | AGMA3724 | LBB324 | None |
| Agricultural Economics | Agribusiness management | AGMA3734 | LBB334 | None |
| Agricultural Economics | Strategic agricultural management | AGMA3744 | LBB344 | None |
| Agricultural Economics | Seminar in Integrated Agricultural management | AGMA3762 | LBB362 | None |
| Agricultural Economics | Research project | AGMA6808 | LBB693 | Selection Hon |
| Agricultural Economics | Financial management | AGMA6814 | LBB602 | Selection Hon |
| Agricultural Economics | Advanced agricultural management | AGMA6824 | LBB601 | Selection Hon |
| Agricultural Economics | Production management | AGMA6834 | LBB603 | Selection Hon |
| Agricultural Economics | Project management | AGMA6844 | LBB604 | Selection Hon |
| Agricultural Economics | Marketing management | AGMA6854 | LBB605 | Selection Hon |
| Agricultural Economics | Human Resource management | AGMA6864 | LBB606 | Selection Hon |
| Agricultural Economics | Financial management | AGMA6874 | LBB609 | Selection Hon |
| Agricultural Economics | Business management | AGMA6884 | LBB607 | Selection Hon |
| Agricultural Economics | Agricultural Management Dissertation | AGMA8900 | LBB700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Agricultural Economics | Agricultural Management Thesis | AGMA9100 | LBB900 | Magric Selection PhD, Permission from ADH |
| Agricultural Engineering | Engineering principles in agricultural practises | AGEG2624 | LNG224 | LWL194 OR WTV164 60% OR WTV134 |
| Agricultural Engineering | Hydraulics | AGEG3714 | LNG314 | LNG224 |
| Agricultural Engineering | Irrigation Systems and Irrigation Surveying | AGEG3724 | LNG324 | LNG314 |
| Agricultural Engineering | Flood and mechanised irrigation | AGEG4814 | LNG414 | LNG324 |
| Agricultural Engineering | Specialised micro, drip and underground irrigation systems | AGEG4824 | LNG424 | LNG414 |
| Animal, Wildlife & Grassland Sciences | Mathematical and Biometrical Principles in Agriculture | AGRI1624 | LWL124 | NCS Mathematics level 3 AP>30, OR Mathematic Literacy level 7 AP>32 OR Bagric-ext or UPPAgric first yer succesfull completed |
| Animal, Wildlife and Grassland Sciences | Microbiological principles in Agriculture | AGRI1664 | LWL164 | NCS Mathematics level 3 AP>30, OR Mathematic Literacy level 7 AP>32 OR Bagric-ext or UPPAgric first yer succesfull completed |
| Animal, Wildlife and Grassland Sciences | Introduction to animal and plant breeding | ANIB2624 | DTL224 | None |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|---|----------|----------|--|
| Animal, Wildlife and Grassland Sciences | Theory of animal breeding | ANIB3714 | DTL314 | None |
| Animal, Wildlife and Grassland Sciences | New technologies in animal breeding | ANIB3724 | DTL324 | None |
| Animal, Wildlife and Grassland Sciences | Animal breeding: Mixed model theory | ANIB4814 | DTL414 | DTL314 |
| Animal, Wildlife and Grassland Sciences | Animal breeding: Practical application | ANIB4824 | DTL424 | None |
| Animal, Wildlife and Grassland Sciences | Animal breeding: Mixed model theory | ANIB6814 | DTL601 | DTL314 |
| Animal, Wildlife and Grassland Sciences | Animal breeding: Practical application | ANIB6824 | DTL602 | None |
| Animal, Wildlife and Grassland Sciences | Applied animal breeding | ANIB6826 | DTL603 | None |
| Animal, Wildlife and Grassland Sciences | Animal Breeding Dissertation | ANIB8900 | VKD700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Animal, Wildlife and Grassland Sciences | Animal Breeding Thesis | ANIB9100 | VKD900 | MSc or MScAgric Selection PhD or DSc, Permission from ADH |
| Animal, Wildlife and Grassland Sciences | Introduction to animal, wildlife and grassland sciences | ANIG1624 | VWW124 | None |
| Animal, Wildlife and Grassland Sciences | Introductory ruminant production | ANIG2614 | VKD214 | None |
| Animal, Wildlife and Grassland Sciences | Introductory monogastric production | ANIG2624 | VKD224 | None |
| Animal, Wildlife and Grassland Sciences | Cattle production systems | ANIG3714 | VKD314 | None |
| Animal, Wildlife and Grassland Sciences | Sheep and goat production systems | ANIG3724 | VKD324 | None |
| Animal, Wildlife and Grassland Sciences | Poultry production systems | ANIG3734 | VKD334 | None |
| Animal, Wildlife and Grassland Sciences | Pig production systems | ANIG3744 | VKD344 | None |
| Animal, Wildlife and Grassland Sciences | Literature review Animal, Wildlife and Grassland Sciences | ANIG4803 | VWW403 | None |
| Animal, Wildlife and Grassland Sciences | Research project Animal, Wildlife and Grassland Sciences | ANIG4805 | VKD693 | None |
| Animal, Wildlife and Grassland Sciences | Fundamental and experimental animal nutrition | ANIN3734 | DVL334 | BCC214 min 65% |
| Animal, Wildlife and Grassland Sciences | Properties of feeds, balancing rations and fodder flow planning | ANIN3744 | DVL344 | None |
| Animal, Wildlife and Grassland Sciences | Applied nutrition of wild herbivores and carnivores | ANIN3764 | VWW464 | None |
| Animal, Wildlife and Grassland Sciences | Applied monogastric nutrition | ANIN4834 | DVL434 | min DVL334 |
| Animal, Wildlife and Grassland Sciences | Applied ruminant nutrition | ANIN4864 | DVL464 | min DVL334 |
| Animal, Wildlife and Grassland Sciences | Fundamental animal nutrition | ANIN6815 | DVL601 | None |
| Animal, Wildlife and Grassland Sciences | Experimental animal breeding | ANIN6825 | DVL602 | None |
| Animal, Wildlife and Grassland Sciences | Applied ruminant nutrition | ANIN6864 | DVL603 | min DVL334 |
| Animal, Wildlife and Grassland Sciences | Animal Nutrition Dissertation | ANIN8900 | VKD700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Animal, Wildlife and Grassland Sciences | Animal Nutrition Thesis | ANIN9100 | VKD900 | MSc or MScAgric Selection PhD or DSc, Permission from ADH |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|---|----------|----------|--|
| Animal, Wildlife and Grassland Sciences | Animal anatomy and physiology of farm animals | ANIP3714 | DAF314 | None |
| Animal, Wildlife and Grassland Sciences | Animal Health | ANIP3724 | DAF324 | None |
| Animal, Wildlife and Grassland Sciences | Applied reproduction physiology in farm animals | ANIP4814 | DAF414 | None |
| Animal, Wildlife and Grassland Sciences | Growth and lactation physiology | ANIP4824 | DAF424 | None |
| Animal, Wildlife and Grassland Sciences | Applied reproduction physiology in farm animals | ANIP6814 | DAF603 | None |
| Animal, Wildlife and Grassland Sciences | General Animal Physiology | ANIP6816 | DAF601 | None |
| Animal, Wildlife and Grassland Sciences | Growth and lactation physiology | ANIP6824 | DAF602 | None |
| Animal, Wildlife and Grassland Sciences | Growth and lactation physiology | ANIP6824 | DAF602 | None |
| Animal, Wildlife and Grassland Sciences | Animal Science Dissertaion | ANIS8900 | VKD700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Animal, Wildlife and Grassland Sciences | Animal Science Thesis | ANIS9100 | VKD900 | MSc or MScAgric Selection PhD or DSc, Permission from ADH |
| Animal, Wildlife and Grassland Sciences | Agricultural Datametry | DATA2614 | DMT214 | None |
| Animal, Wildlife and Grassland Sciences | Agricultural Datametry | DATA2624 | DMT224 | None |
| Animal, Wildlife and Grassland Sciences | Statistical analyses | DATA3722 | DMT322 | None |
| Animal, Wildlife and Grassland Sciences | Grassland Ecology | GRAS2614 | WDK214 | None |
| Animal, Wildlife and Grassland Sciences | Applied veld management and veld evaluation | GRAS3714 | WDK314 | WDK214 |
| Animal, Wildlife and Grassland Sciences | Intensive pasture production | GRAS3724 | WDK324 | None |
| Animal, Wildlife and Grassland Sciences | Production and utilisation ecology | GRAS4814 | WDK414 | WDK314 |
| Animal, Wildlife and Grassland Sciences | Advanced veld management | GRAS4824 | WDK424 | WDK314 |
| Animal, Wildlife and Grassland Sciences | Defoliation phenology and physiology | GRAS4834 | WDK434 | WDK314 |
| Animal, Wildlife and Grassland Sciences | Advanced fodder plant evaluation | GRAS4844 | WDK444 | WDK314 |
| Animal, Wildlife and Grassland Sciences | Intensive pasture production | GRAS6805 | WDK603 | None |
| Animal, Wildlife and Grassland Sciences | Production and utilisation ecology | GRAS6814 | WDK414 | WDK314 |
| Animal, Wildlife and Grassland Sciences | Advanced veld management | GRAS6824 | WDK424 | WDK314 |
| Animal, Wildlife and Grassland Sciences | Defoliation phenology and physiology | GRAS6834 | WDK434 | WDK314 |
| Animal, Wildlife and Grassland Sciences | Advanced fodder plant evaluation | GRAS6844 | WDK444 | WDK314 |
| Animal, Wildlife and Grassland Sciences | Grassland Science Dissertation | GRAS8900 | WDK700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Animal, Wildlife and Grassland Sciences | Grassland Science Thesis | GRAS9100 | WDK900 | MSc or MScAgric Selection PhD or DSc, Permission from ADH |
| Animal, Wildlife and Grassland Sciences | Habitat preferences and diet selection of game | WILD6806 | NLE601 | Selection BScHon |
| Animal, Wildlife and Grassland Sciences | Research essay | WILD6808 | NLE692 | Selection BScHon |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|--|-----------|-----------|--|
| Animal, Wildlife and Grassland Sciences | Habitat evaluation and monitoring | WILD6816 | NLE602 | Selection BScHon |
| Animal, Wildlife and Grassland Sciences | Integrated planning and practical environmental management practices | WILD6828 | NLE603 | Selection BScHon |
| Animal, Wildlife and Grassland Sciences | Applied Wildlife management | WILMT6826 | NLB603 | Selection Hon |
| Animal, Wildlife and Grassland Sciences | Wildlife Management Thesis | WILMT9100 | NLB900 | MSc Selection PhD, Permission from ADH |
| Animal, Wildlife and Grassland Sciences | Wildlife Thesis | WILMT9100 | NLB900 | MSc Selection PhD, Permission from ADH |
| Animal, Wildlife and Grassland Sciences | Wildlife Management Research Project | WLMT6808 | NLB692 | Selection Hon |
| Animal, Wildlife and Grassland Sciences | Veld and Game ecology | WLMT6816 | NLB601 | Selection Hon |
| Animal, Wildlife and Grassland Sciences | Applied habitat evaluation and wildlife feeding | WLMT6836 | NLB602 | Selection Hon |
| Animal, Wildlife and Grassland Sciences | Wildlife Management Dissertation | WLMT8900 | NLB700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Architecture | Architecture Dissertation | ARCH8900 | ARG700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Architecture | Architecture Thesis | ARCH9100 | ARG900 | MArch Selection PhD or DSc, Permission from ADH |
| Architecture | Theory of Architecture | ATRE7904 | TAR70(1)4 | Selection for March(Prof) |
| Architecture | Architectural Treatise | ATRE7904 | TAR714 | Selection MArch(Prof) |
| Architecture | Computer Draughting | CDRA2604 | GRT204 | CONS1606, DESN1600, PTEC1504, TRIG1512 |
| Architecture | Construction | CONS1606 | BOW106 | Selection BArchStud |
| Architecture | Construction | CONS2606 | BOW206 | CONS1606, DESN1600, HARC1604 |
| Architecture | Construction | CONS3706 | BOW306 | CONS2606, DESN2600, HARC2604, TARC2604 |
| Architecture | Construction | CONS6808 | BOW608 | Selection BArchStud(Hons) |
| Architecture | Construction | CONS7908 | BOW708 | Selection MArch(Prof) |
| Architecture | Construction for Quantity Surveyors | COQS2604 | BOW204 | None |
| Architecture | Construction for Quantity Surveyors | COQS3704 | BOW304 | COQS2604 |
| Architecture | Design Dissertation | DDIS7900 | SKR791 | Selection MArch(Prof) |
| Architecture | Design | DESN1600 | ONW100 | Selection BArchStud |
| Architecture | Design | DESN2600 | ONW200 | CONS1606, DESN1600, HARC1604 |
| Architecture | Design | DESN3700 | ONW300 | CONS2606 DESN2600 HARC2604 TARC2604 |
| Architecture | Design | DESN6800 | ONW600 | Selection BArchStud(Hons) |
| Architecture | Design Methods in Architecture | DMET6812 | OMA612 | Selection BArchStud(Hons) |
| Architecture | History of Architecture | HARC1604 | OGT106 / | Selection BArchStud |
| Architecture | History of Architecture | HARC1604 | OGT106(4) | Selection for BArchStud |
| Architecture | History of Architecture | HARC2604 | OGT204 | CONS1606, DESN1600, HARC1604 |
| Architecture | History of Architecture | HARC2604 | OGT206(4) | CONS1606, DESN1600, HARC1604 |
| Architecture | History of Architecture | HARC3704 | OGT304 | CONS2606, DESN2600, HARC2604, TARC2604 |
| Architecture | History of Urban Settlement | HURB6806 | OGT606 | Selection BArchStud(Hons) |
| Architecture | Professional Architect's Practice | PARC7904 | PAK714 / | Selection MArch(Prof) |
| Architecture | Photography | PHOT1522 | GRT122 | Selection BArchStud |
| Architecture | Presentation Techniques | PTEC1522 | GRT104 | Selection BArchStud |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|-------------------------------------|---|----------|-----------|--|
| Architecture | Research methods in Architecture | RMET6822 | NMA622 | Selection BArchStud(Hons) |
| Architecture | Theory of Architecture | TARC2604 | TAR22(0)4 | BOW106, OGT106, ONW100 |
| Architecture | Theory of Architecture | TARC2604 | TAR224 / | CONS1606, DESN1600, HARC1604 |
| Architecture | Theory of Architecture | TARC3704 | TAR304 | CONS2606, DESN2600, HARC2604, TARC2604 |
| Architecture | Theory of Architecture | TARC6804 | TAR604 | Selection BArchStud(Hons) |
| Architecture | Trigonometrical Drawing | TRIG1512 | GRT112 | Selection BArchStud |
| Centre for Environmental Management | Resources And Processes | ENMT5810 | MOB707 | Selection for PGD (Environmental Management) |
| Centre for Environmental Management | Corporate Environmental Management And Sustainability | ENMT5820 | MOB708 | Selection for PGD in Environmental Management |
| Centre for Environmental Management | Environmental Impact Assessment Tools | ENMT5826 | MOB708 | Selection for PGD in Environmental Management |
| Centre for Environmental Management | Extended Mini-Dissertation | ENMT7900 | MOB791 | Selection for Master's in Environmental Management) |
| Centre for Environmental Management | Resources And Processes | ENMT7910 | MOB707 | Selection for Master's in Environmental Management |
| Centre for Environmental Management | Corporate Environmental Management And Sustainability | ENMT7920 | MOB708 | Selection for Master's in Environmental Management |
| Centre for Environmental Management | Biodiversity And Conservation Management | ENMT7930 | MOB743 | Selection for Master's in Environmental Management) |
| Centre for Environmental Management | Environmental Management Dissertation | ENMT8900 | MEM700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Centre for Environmental Management | Environmental Management Thesis | ENMT9100 | MEM900 | MSc Selection PhD or DSc, Permission from ADH |
| Centre for Environmental Management | Introduction To Integrated Water Resources, Resource Economics And Governance | IWM5810 | NA | Selection for PGD in Integrated Water Management |
| Centre for Environmental Management | Integrated Water Resources Science | IWM5820 | NA | Selection for PGD in Integrated Water Management |
| Centre for Environmental Management | Integrated Water Resources Management And Legislation | IWMT5826 | NA | Selection for PGD in Integrated Water Management |
| Centre for Environmental Management | Water, Pollution And Rehabilitation Management | IWMT7910 | MOB741 | Selection for Master's in Environmental Management) |
| Centre for Environmental Management | Wetland Management | IWMT7950 | MOB745 | Selection for Master's in Environmental Management) |
| Centre for Environmental Management | Limnology Honours | LIMG6800 | LIM600 | Selection for BScHon |
| Centre for Environmental Management | Water Resources Management | LIMG8900 | LIM700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Centre for Environmental Management | Limnology Thesis | LIMG9100 | LIM900 | MSc or MScAgric Selection PhD or DSc, Permission from ADH |
| Centre for Environmental Management | Integrated Water Resources Management Dissertation | WRMT8900 | NA | BSc in relevant discipline, Selection MSc, Permission from ADH |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|---|-----------|----------|--|
| Centre for Sustainable Agriculture, Rural Development and Extension | Fundamentals of Agricultural Economics and Marketing | SAAM 1716 | ADS 146 | Diploma or Adv Certificate |
| Centre for Sustainable Agriculture, Rural Development and Extension | Fundamentals of Agricultural Economics and Marketing | SAAM 1726 | ADS 146 | Diploma or Adv Certificate |
| Centre for Sustainable Agriculture, Rural Development and Extension | National and international agricultural marketing | SAAM 7926 | MVL 741 | Selection Masters(SA) |
| Centre for Sustainable Agriculture, Rural Development and Extension | Introduction to Plant Production Practices | SACP 1716 | ADS 116 | Diploma or Adv Certificate |
| Centre for Sustainable Agriculture, Rural Development and Extension | Introduction to Plant Production Practices | SACP 1726 | ADS 116 | Diploma or Adv Certificate |
| Centre for Sustainable Agriculture, Rural Development and Extension | Sustainable Plant Production Systems | SACP 7916 | MVL 761 | Selection Masters(SA) |
| Centre for Sustainable Agriculture, Rural Development and Extension | Basic communication skill | SACT 1716 | ADS 226 | Diploma or Adv Certificate |
| Centre for Sustainable Agriculture, Rural Development and Extension | Basic communication skill | SACT 1726 | ADS 226 | Diploma or Adv Certificate |
| Centre for Sustainable Agriculture, Rural Development and Extension | Communication and Technology transfer for Sustainable Agriculture | SACT 7926 | MVL 733 | Selection Masters(SA) |
| Centre for Sustainable Agriculture, Rural Development and Extension | Sustainable Agriculture Thesis | SADR9100 | VHL900 | MSc Selection PhD, Permission from ADH |
| Centre for Sustainable Agriculture, Rural Development and Extension | Rural Agricultural extension: issues and concepts | SAEX 7916 | MVL 730 | Selection Masters(SA) |
| Centre for Sustainable Agriculture, Rural Development and Extension | Farm management for sustainable agriculture | SAFM 7926 | MVL 750 | Selection Masters(SA) |
| Centre for Sustainable Agriculture, Rural Development and Extension | Introduction to Livestock Production Practices | SALP 1716 | ADS 136 | Diploma or Adv Certificate |
| Centre for Sustainable Agriculture, Rural Development and Extension | Introduction to Livestock Production Practices | SALP 1726 | ADS 136 | Diploma or Adv Certificate |
| Centre for Sustainable Agriculture, Rural Development and Extension | Sustainable Livestock Production Systems | SALP 7916 | MVL 770 | Selection Masters(SA) |
| Centre for Sustainable Agriculture, Rural Development and Extension | Dissertation | SAMD 7900 | MVL792 | Selection Masters(SA) |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|---|-----------|----------|--|
| Centre for Sustainable Agriculture, Rural Development and Extension | Publishable article(s) | SAPA 7900 | MVL793 | Selection Masters(SA) |
| Centre for Sustainable Agriculture, Rural Development and Extension | Project management in agriculture and rural development | SAPM 7926 | MVL724 | Selection Masters(SA) |
| Centre for Sustainable Agriculture, Rural Development and Extension | Fundamentals of Rural Development | SARD 1716 | ADS 126 | Diploma or Adv Certificate |
| Centre for Sustainable Agriculture, Rural Development and Extension | Fundamentals of Rural Development | SARD 1726 | ADS 126 | Diploma or Adv Certificate |
| Centre for Sustainable Agriculture, Rural Development and Extension | Rural Development sociology | SARD 7926 | MVL 731 | Selection Masters(SA) |
| Centre for Sustainable Agriculture, Rural Development and Extension | Research Methodology and project proposal | SARM 7903 | MVL 721 | Selection Masters(SA) |
| Centre for Sustainable Agriculture, Rural Development and Extension | Introduction to Sustainable Agriculture and Rural Development | SASA 7903 | MVL 720 | Selection Masters(SA) |
| Centre for Sustainable Agriculture, Rural Development and Extension | Extended script | SASC 7900 | MVL791 | Selection Masters(SA) |
| Centre for Sustainable Agriculture, Rural Development and Extension | Strategic management and planning in agriculture | SASM 7926 | MVL 752 | Selection Masters(SA) |
| Centre for Sustainable Agriculture, Rural Development and Extension | Agricultural technology for developing countries | SATN 7916 | MVL 732 | Selection Masters(SA) |
| Centre for Sustainable Agriculture, Rural Development and Extension | Sustainable utilization of natural resources and environment | SAUR 7916 | MVL 723 | Selection Masters(SA) |
| Centre for Sustainable Agriculture, Rural Development and Extension | Agricultural product processing and marketing | SAVA 7926 | MVL 740 | Selection Masters(SA) |
| Chemistry | Introduction to general Chemistry | CHEM1512 | CEM112 | NCS |
| Chemistry | Inorganic and Analytical Chemistry (Mainstream) | CHEM1513 | New | NCS |
| Chemistry | Inorganic and Analytical Chemistry (Mainstream) | CHEM1514 | CEM114 | NCS |
| Chemistry | Physical and Organic Chemistry (Mainstream) | CHEM1623 | New | CEM114 |
| Chemistry | Physical and Organic Chemistry (Mainstream) | CHEM1624 | CEM124 | CEM114 |
| Chemistry | Physical and Organic Chemistry | CHEM1643 | CEM132 | CEM114 |
| Chemistry | Physical and Organic Chemistry | CHEM1644 | CEM144 | CEM114 |
| Chemistry | Physical Chemistry | CHEM2614 | CEM214 | CEM114, CEM124 or 60% CEM144, WTW114/134 |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|----------------------------------|--|----------|----------|--|
| Chemistry | Organic Chemistry | CHEM2624 | CEM224 | CEM114, CEM124 or 60% CEM144, WTW114/134 |
| Chemistry | Analytical Chemistry | CHEM2632 | CEM232 | CEM114, CEM124 or 60% CEM144, WTW114/134 |
| Chemistry | Inorganic Chemistry | CHEM2642 | CEM242 | CEM214, CEM232 |
| Chemistry | Analytical Chemistry | CHEM3714 | CEM314 | CEM214, CEM232, CEM242, WTW124/144 |
| Chemistry | Inorganic Chemistry | CHEM3724 | CEM324 | CEM314 |
| Chemistry | Physical Chemistry | CHEM3734 | CEM334 | CEM214, CEM232, WTW124/144 |
| Chemistry | Organic Chemistry | CHEM3744 | CEM344 | CEM224 |
| Chemistry | Inorganic Chemistry | CHEM6814 | CEM614 | CEM314, CEM334, CEM324, CEM344 Selection BScHon |
| Chemistry | Inorganic Chemistry | CHEM6824 | CEM624 | CEM314, CEM334, CEM324, CEM344 Selection BScHon |
| Chemistry | Physical Chemistry | CHEM6834 | CEM634 | CEM314, CEM334, CEM324, CEM344 Selection BScHon |
| Chemistry | Physical Chemistry | CHEM6844 | CEM644 | CEM314, CEM334, CEM324, CEM344 Selection BScHon |
| Chemistry | Organic Chemistry | CHEM6854 | CEM654 | CEM314, CEM334, CEM324, CEM344 Selection BScHon |
| Chemistry | Organic Chemistry | CHEM6864 | CEM664 | CEM314, CEM334, CEM324, CEM344 Selection BScHon |
| Chemistry | Analytical Chemistry | CHEM6874 | CEM674 | CEM314, CEM334, CEM324, CEM344 Selection BScHon |
| Chemistry | Analytical Chemistry | CHEM6884 | CEM684 | CEM314, CEM334, CEM324, CEM344 Selection BScHon |
| Chemistry | Chemistry Dissertation | CHEM8900 | CEM700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Chemistry | Chemistry Thesis | CHEM9100 | CEM900 | MSc Selection PhD or DSc, Permission from ADH |
| Computer Science and Informatics | Introduction to Information Systems | BCIS1513 | New | With CSIL1511 |
| Computer Science and Informatics | Introduction to Information Systems | BCIS1513 | New | With CSIL1511 |
| Computer Science and Informatics | Computer Assisted Software Development | BCIS1623 | New | CSIS1614 |
| Computer Science and Informatics | Computer Assisted Software Development | BCIS1623 | New | CSIS1614 |
| Computer Science and Informatics | Systems Analysis and Design | BCIS2614 | New | BCIS1513 |
| Computer Science and Informatics | Systems Analysis and Design | BCIS2614 | New | BCIS1513 |
| Computer Science and Informatics | Systems Infrastructure and Integration | BCIS2624 | New | None |
| Computer Science and Informatics | Systems Infrastructure and Integration | BCIS2624 | New | None |
| Computer Science and Informatics | Information Systems in Organisations | BCIS3714 | New | None |
| Computer Science and Informatics | Information Systems in Organisations | BCIS3714 | New | None |
| Computer Science and Informatics | Artificial Intelligence | CSIC6813 | RIS608 | MATM1614 and MATM1624 |
| Computer Science and Informatics | Artificial Intelligence | CSIC6823 | RIS608 | MATM1614 and MATM1624 |
| Computer Science and Informatics | Robotics | CSIC6833 | RIS623 | None |
| Computer Science and Informatics | Robotics | CSIC6843 | RIS623 | None |
| Computer Science and Informatics | Capita Selecta | CSIC6853 | RIS630 | None |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|----------------------------------|---|----------|------------------|---------------------------------------|
| Computer Science and Informatics | Capita Selecta | CSIC6863 | RIS630 | None |
| Computer Science and Informatics | Business Intelligence | CSID6813 | RIS610 | CSID6853 (30%) or CSID6863 (30%) |
| Computer Science and Informatics | Business Intelligence | CSID6823 | RIS610 | CSID6853 (30%) or CSID6863 (30%) |
| Computer Science and Informatics | Advanced Databases | CSID6833 | RIS622 | CSIS2634 |
| Computer Science and Informatics | Advanced Databases | CSID6843 | RIS622 | CSIS2634 |
| Computer Science and Informatics | Data Warehousing | CSID6853 | RIS625 | CSIS3714 |
| Computer Science and Informatics | Data Warehousing | CSID6863 | RIS625 | CSIS3714 |
| Computer Science and Informatics | Introduction to Object-Oriented Programming for Engineers | CSIE1606 | RIN104, CISE1606 | With MATM1614 and MATM1624 |
| Computer Science and Informatics | Introduction to Object-Oriented Programming for Engineers | CSIE1606 | RIN104, CISE1606 | With WTW114 and WTW124 |
| Computer Science and Informatics | Data Structures and Algorithms for Engineers | CSIE2613 | CISE2613 | CSIE1606, MATM1614 and MATM1624 (40%) |
| Computer Science and Informatics | Data Structures and Algorithms for Engineers | CSIE2613 | CISE2613 | CSIE1606, WTW114 and WTW124 (40%) |
| Computer Science and Informatics | Boole Algebra | CSIE3614 | CISE3614 | None |
| Computer Science and Informatics | Boole Algebra | CSIE3614 | CISE3614 | None |
| Computer Science and Informatics | Microprocessors | CSIE3724 | CISE3724 | CSIE3614 |
| Computer Science and Informatics | Microprocessors | CSIE3724 | CISE3724 | CSIE3614 |
| Computer Science and Informatics | Knowledge-based Systems | CSIE6813 | RIS609 | None |
| Computer Science and Informatics | Knowledge-based Systems | CSIE6823 | RIS609 | None |
| Computer Science and Informatics | Management Information Systems | CSIE6833 | RIS612 | None |
| Computer Science and Informatics | Management Information Systems | CSIE6843 | RIS612 | None |
| Computer Science and Informatics | IT Project Management | CSIE6853 | RIS613 | None |
| Computer Science and Informatics | IT Project Management | CSIE6863 | RIS613 | None |
| Computer Science and Informatics | Decision Support Systems | CSIE6873 | RIS614 | None |
| Computer Science and Informatics | Decision Support Systems | CSIE6883 | RIS614 | None |
| Computer Science and Informatics | Information Security | CSII6813 | RIS604 | CSIS3744 |
| Computer Science and Informatics | Information Security | CSII6823 | RIS604 | CSIS3744 |
| Computer Science and Informatics | Human-Computer Interaction | CSII6833 | RIS615 | None |
| Computer Science and Informatics | Human-Computer Interaction | CSII6843 | RIS615 | None |
| Computer Science and Informatics | Computer Ethics | CSII6853 | RIS618 | None |
| Computer Science and Informatics | Computer Ethics | CSII6863 | RIS618 | None |
| Computer Science and Informatics | Computer Literacy: Part 1 | CSIL1511 | BRS111 | None |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|----------------------------------|---|-------------------|----------------|-----------------------|
| Computer Science and Informatics | Computer Literacy: Part 1 | CSIL1511 | BRS111 | None |
| Computer Science and Informatics | Computer Literacy: Part 2 | CSIL1521 | BRS121 | CSIL1511 |
| Computer Science and Informatics | Computer Literacy: Part 2 | CSIL1521 | BRS121 | CSIL1511 |
| Computer Science and Informatics | Theory of Algorithms | CSIM6813 | RIS606 | MATM1614 and MATM1624 |
| Computer Science and Informatics | Theory of Algorithms | CSIM6823 | RIS606 | MATM1614 and MATM1624 |
| Computer Science and Informatics | Automata Theory and Applications | CSIM6833 | RIS624 | None |
| Computer Science and Informatics | Automata Theory and Applications | CSIM6843 | RIS624 | None |
| Computer Science and Informatics | Network Management | CSIN6813 | RIS601 | CSIS3744 |
| Computer Science and Informatics | Network Management | CSIN6823 | RIS601 | CSIS3744 |
| Computer Science and Informatics | Advanced Computer Networks | CSIN6833 | RIS616 | CSIS3744 |
| Computer Science and Informatics | Advanced Computer Networks | CSIN6843 | RIS616 | CSIS3744 |
| Computer Science and Informatics | Object Design | CSIP6813 | RIS617 | None |
| Computer Science and Informatics | Object Design | CSIP6823 | RIS617 | None |
| Computer Science and Informatics | Advanced Internet Programming | CSIP6833 | RIS619 | CSIS3734 |
| Computer Science and Informatics | Advanced Internet Programming | CSIP6843 | RIS619 | CSIS3734 |
| Computer Science and Informatics | Advanced Programming 1 | CSIP6853 | RIS620 | CSIS3724 |
| Computer Science and Informatics | Advanced Programming 1 | CSIP6863 | RIS620 | CSIS3724 |
| Computer Science and Informatics | Advanced Programming 2 | CSIP6873 | RIS621 | CSIP6853 or CSIP6863 |
| Computer Science and Informatics | Advanced Programming 2 | CSIP6883 | RIS621 | CSIP6853 or CSIP6863 |
| Computer Science and Informatics | Introduction to Programming: Part 1 | CSIS1534 | RIS134 | With CSIL1511 |
| Computer Science and Informatics | Introduction to Programming: Part 1 | CSIS1534 csis1564 | RIS134 | With CSIL1511 |
| Computer Science and Informatics | Introduction to Computer Hardware | CSIS1553 | RIS154, RIS153 | None |
| Computer Science and Informatics | Introduction to Computer Hardware | CSIS1553 | RIS154, RIS153 | None |
| Computer Science and Informatics | Programming and Problem Solving: Part 1 | CSIS1614 | RIS114 | With CSIL1511 |
| Computer Science and Informatics | Programming and Problem Solving: Part 1 | CSIS1614 | RIS114 | With CSIL1511 |
| Computer Science and Informatics | Programming and Problem Solving: Part 2 | CSIS1624 | RIS124 | CSIS1614 or CSIS1644 |
| Computer Science and Informatics | Programming and Problem Solving: Part 2 | CSIS1624 | RIS124 | CSIS1614 or CSIS1644 |
| Computer Science and Informatics | Introduction to Programming: Part 2 | CSIS1644 | RIS144 | CSIS1634 |
| Computer Science and Informatics | Introduction to the Internet and Web Page Development | CSIS1664 | RIS164 | CSIS1614 or CSIS1644 |
| Computer Science and Informatics | Introduction to the Internet and Web Page Development | CSIS1664 | RIS164 | CSIS1614 or CSIS1644 |
| Computer Science and Informatics | Visual Basic for Applications with the focus on Excel | CSIS1682 | RIS182 | CSIL1511 |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|----------------------------------|---|----------|----------|----------------------|
| Computer Science and Informatics | Visual Basic for Applications with the Focus on Excel | CSIS1682 | RIS182 | CSIL1511 |
| Computer Science and Informatics | Data Structures and Advanced Programming | CSIS2614 | RIS214 | CSIS1624 |
| Computer Science and Informatics | Data Structures and Advanced Programming | CSIS2614 | RIS214 | CSIS1624 |
| Computer Science and Informatics | Humen-Computer Interaction | CSIS2624 | RIS224 | CSIS1614 or CSIS1644 |
| Computer Science and Informatics | Humen-Computer Interaction | CSIS2624 | RIS224 | CSIS1624 |
| Computer Science and Informatics | Introduction to Databases and Database Management Systems: Part 1 | CSIS2634 | RIS294 | CSIS1624 |
| Computer Science and Informatics | Introduction to Databases and Database Management Systems: Part 1 | CSIS2634 | RIS294 | CSIS1624 |
| Computer Science and Informatics | Information Technology Service Learning | CSIS2642 | RIS242 | CSIL1521 |
| Computer Science and Informatics | Information Technology Service Learning | CSIS2642 | RIS242 | CSIL1511 + CSIL1521 |
| Computer Science and Informatics | Software Design | CSIS2664 | RIS264 | CSIS2614 |
| Computer Science and Informatics | Software Design | CSIS2664 | RIS264 | CSIS2614 |
| Computer Science and Informatics | Introduction to Databases and Database Management Systems: Part 2 | CSIS3714 | RIS314 | CSIS2634 |
| Computer Science and Informatics | Introduction to Databases and Database Management Systems: Part 2 | CSIS3714 | RIS314 | CSIS2634 |
| Computer Science and Informatics | Software Engineering | CSIS3724 | RIS324 | CSIS3714 |
| Computer Science and Informatics | Software Engineering | CSIS3724 | RIS324 | CSIS3714 |
| Computer Science and Informatics | Internet Programming | CSIS3734 | RIS334 | CSIS1664 K290 |
| Computer Science and Informatics | Internet Programming | CSIS3734 | RIS334 | CSIS1664 |
| Computer Science and Informatics | Computer Networks | CSIS3744 | RIS344 | CSIS1553 |
| Computer Science and Informatics | Computer Networks | CSIS3744 | RIS344 | CSIS1553 |
| Computer Science and Informatics | Project | CSIS6806 | RIS693 | None |
| Computer Science and Informatics | Project | CSIS6808 | RIS693 | None |
| Computer Science and Informatics | Introduction to Research | CSIS6813 | RIS626 | None |
| Computer Science and Informatics | Introduction to Research | CSIS6823 | RIS626 | None |
| Computer Science and Informatics | Extended Research Essay | CSIS7910 | RIS791 | None |
| Computer Science and Informatics | Extended Research Essay | CSIS7910 | RIS791 | None |
| Computer Science and Informatics | Human-Computer Interaction | CSIS7915 | RIS715 | None |
| Computer Science and Informatics | Human-Computer Interaction | CSIS7915 | RIS715 | None |
| Computer Science and Informatics | Extended Research Essay | CSIS7920 | RIS791 | None |
| Computer Science and Informatics | Extended Research Essay | CSIS7920 | RIS791 | None |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|----------------------------------|---|----------|----------|--|
| Computer Science and Informatics | Human-Computer Interaction | CSIS7925 | RIS715 | None |
| Computer Science and Informatics | Human-Computer Interaction | CSIS7925 | RIS715 | None |
| Computer Science and Informatics | Data Warehousing | CSIS7935 | RIS725 | None |
| Computer Science and Informatics | Data Warehousing | CSIS7935 | RIS725 | None |
| Computer Science and Informatics | Data Warehousing | CSIS7945 | RIS725 | None |
| Computer Science and Informatics | Data Warehousing | CSIS7945 | RIS725 | None |
| Computer Science and Informatics | Educational Technology | CSIS7955 | RIS730 | None |
| Computer Science and Informatics | Educational Technology | CSIS7955 | RIS730 | None |
| Computer Science and Informatics | Educational Technology | CSIS7965 | RIS730 | None |
| Computer Science and Informatics | Educational Technology | CSIS7965 | RIS730 | None |
| Computer Science and Informatics | Eye Tracking | CSIS7975 | RIS731 | None |
| Computer Science and Informatics | Eye Tracking | CSIS7975 | RIS731 | None |
| Computer Science and Informatics | Eye Tracking | CSIS7985 | RIS731 | None |
| Computer Science and Informatics | Eye Tracking | CSIS7985 | RIS731 | None |
| Computer Science and Informatics | Computer Science Dissertation | CSIS8900 | RIS700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Computer Science and Informatics | Computer Science Dissertation | CSIS8900 | RIS700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Computer Science and Informatics | Computer Science Thesis | CSIS9100 | RIS900 | MSc Selection PhD or DSc, Permission from ADH |
| Consumer Science | Consumer Science Dissertation | CNCS8900 | CMS700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Consumer Science | Consumer Science Thesis | CNCS9100 | CMS900 | MSc Selection PhD or DSc, Permission from ADH |
| Consumer Sciences | Interior design- fabric study | CNCS1534 | ITR134 | None |
| Consumer Sciences | Interior design- fabric study | CNCS1534 | ITR134 | None |
| Consumer Sciences | Ergonomics and Apparatus studies | CNCS1622 | VBW124 | None |
| Consumer Sciences | Ergonomics and Apparatus studies | CNCS1622 | VBW124 | None |
| Consumer Sciences | Home planning | CNCS1624 | ITR124 | None |
| Consumer Sciences | Home planning | CNCS1624 | ITR124 | None |
| Consumer Sciences | Introductory housing | CNCS2624 | BES324 | None |
| Consumer Sciences | Introductory housing | CNCS2624 | BES324 | None |
| Consumer Sciences | Recourse management | CNCS3722 | VBW312 | None |
| Consumer Sciences | Recourse management | CNCS3722 | VBW312 | None |
| Consumer Sciences | Consumer study | CNCS3724 | VBW324 | None |
| Consumer Sciences | Consumer study | CNCS3724 | VBW324 | None |
| Consumer Sciences | Community development | CNCS3732 | VBW332 | None |
| Consumer Sciences | Community development | CNCS3732 | VBW332 | None |
| Consumer Sciences | The interior, clothing or food business | CNCS3744 | VBW344 | None |
| Consumer Sciences | The interior, clothing or food business | CNCS3744 | VBW344 | None |
| Consumer Sciences | Research project | CNCS4809 | HDK692 | None |
| Consumer Sciences | Research project | CNCS4809 | HDK692 | None |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|--------------------|---|----------|----------|--------------|
| Consumer Sciences | History of textiles, clothing, interior or food. | CNCS4814 | HDK606 | None |
| Consumer Sciences | History of textiles, clothing, interior or food. | CNCS4814 | HDK606 | None |
| Consumer Sciences | History of textiles, clothing, interior or food. | CNCS4824 | HDK606 | None |
| Consumer Sciences | History of textiles, clothing, interior or food. | CNCS4824 | HDK606 | None |
| Consumer Sciences | Food security | CNFD1532 | VDS322 | None |
| Consumer Sciences | Food security | CNFD1532 | VDS322 | None |
| Consumer Sciences | Food preparation | CNFD2614 | VDS214 | None |
| Consumer Sciences | Food preparation | CNFD2614 | VDS214 | None |
| Consumer Sciences | Food preparation II | CNFD2624 | VDS224 | None |
| Consumer Sciences | Food preparation II | CNFD2624 | VDS224 | None |
| Consumer Sciences | Food preservation | CNFD3713 | | None |
| Consumer Sciences | Food preservation | CNFD3713 | | None |
| Consumer Sciences | Product development | CNFD3732 | | None |
| Consumer Sciences | Product development | CNFD3732 | | None |
| Consumer Sciences | Meal planning | CNFD3744 | VDS344 | None |
| Consumer Sciences | Meal planning | CNFD3744 | VDS344 | None |
| Consumer Sciences | Consumer analysis of foods | CNFD4808 | VBW601 | None |
| Consumer Sciences | Consumer analysis of foods | CNFD4808 | VBW601 | None |
| Consumer Sciences | Basic Construction | CNST1534 | KLE134 | None |
| Consumer Sciences | Basic Construction | CNST1534 | KLE134 | None |
| Consumer Sciences | Children's clothing and outfit planning | CNST1644 | KLE144 | None |
| Consumer Sciences | Children's clothing and outfit planning | CNST1644 | KLE144 | None |
| Consumer Sciences | Socio-cultural aspect of clothing | CNST2614 | KLE214 | None |
| Consumer Sciences | Socio-cultural aspect of clothing | CNST2614 | KLE214 | None |
| Consumer Sciences | Textile fibres | CNST3712 | TSK312 | None |
| Consumer Sciences | Textile fibres | CNST3712 | TSK312 | None |
| Consumer Sciences | Construction and finishing of textile fabrics. | CNST3722 | TSK322 | None |
| Consumer Sciences | Construction and finishing of textile fabrics. | CNST3722 | TSK322 | None |
| Consumer Sciences | Apparel Industry | CNST3734 | KLE334 | None |
| Consumer Sciences | Apparel Industry | CNST3734 | KLE334 | None |
| Consumer Sciences | Pattern design | CNST3744 | KLE344 | None |
| Consumer Sciences | Pattern design | CNST3744 | KLE344 | None |
| Consumer Sciences | Weaving, knitting and other construction methods. Embroidery. | CNST3754 | TSK424 | None |
| Consumer Sciences | Weaving, knitting and other construction methods. Embroidery. | CNST3754 | TSK424 | None |
| Consumer Sciences | Clothing industry and clothing for special needs | CNST4814 | HDK602 | None |
| Consumer Sciences | Clothing industry and clothing for special needs | CNST4814 | HDK602 | None |
| Consumer Sciences | Clothing industry:quality control | CNST4824 | HDK602 | None |
| Consumer Sciences | Clothing industry:quality control | CNST4824 | HDK602 | None |
| Consumer Sciences | Social aspects of clothing | CNST4834 | HDK603 | None |
| Consumer Sciences | Social aspects of clothing | CNST4834 | HDK603 | None |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|--------------------|--|----------|----------|--|
| Consumer Sciences | Psychological aspects of clothing | CNST4844 | HDK603 | None |
| Consumer Sciences | Psychological aspects of clothing | CNST4844 | HDK603 | None |
| Consumer Sciences | Natural textile fibres en regenerated fibres. | CNST4854 | HDK604 | None |
| Consumer Sciences | Natural textile fibres en regenerated fibres. | CNST4854 | HDK604 | None |
| Consumer Sciences | Finishes for natural fibres | CNST4864 | HDK604 | None |
| Consumer Sciences | Finishes for natural fibres | CNST4864 | HDK604 | None |
| Consumer Sciences | Nutrition | | VDG408 | None |
| Consumer Sciences | Nutrition | | VDG408 | None |
| DiMTEC | Ethnic and cultural conduct | DiME7910 | DiM704 | Relevant NQF 8 qualification >60% |
| DiMTEC | Information management | DiMG7900 | DiM703 | Relevant NQF 8 qualification >60% |
| DiMTEC | Trauma management | DiMH7910 | DiM701 | Relevant NQF 8 qualification >60% |
| DiMTEC | Environmental risks and impact assessments | DiMI7910 | DiM706 | Relevant NQF 8 qualification >60% |
| DiMTEC | Management of media relations | DiMM7910 | DiM705 | Relevant NQF 8 qualification >60% |
| DiMTEC | Political strategic planning | DiMP7900 | DiM702 | Relevant NQF 8 qualification >60% |
| DiMTEC | | DiMR7900 | DiM791 | Relevant NQF 8 qualification >60% |
| DiMTEC | Disaster vulnerability and risks assessments | DiMR7910 | DiM707 | Relevant NQF 8 qualification >60% |
| DiMTEC | Disaster Management Thesis | DSMT9100 | DIM900 | MSc Selection PhD or DSc, Permission from ADH |
| DiMTEC | Research design and Methodology | | DiM601 | 3 year NQF7 qualification >60% |
| DiMTEC | Hazards and disaster management | | DiM602 | 3 year NQF7 qualification >60% |
| DiMTEC | Strategic disaster management | | DiM603 | 3 year NQF7 qualification >60% |
| DiMTEC | Disaster management principles and practices | | DiM604 | 3 year NQF7 qualification >60% |
| DiMTEC | Disaster risk management | | DiM605 | 3 year NQF7 qualification >60% |
| DiMTEC | Information technology in disaster management | | DiM606 | 3 year NQF7 qualification >60% |
| DiMTEC | Public health | | DiM607 | 3 year NQF7 qualification >60% |
| DiMTEC | Management of natural and human made disasters | | DiM608 | 3 year NQF7 qualification >60% |
| Genetics | Introduction To Genetics | BLGY1623 | BLG124 | BLGY1513 OR BLGY1503 |
| Genetics | Advanced Forensic Techniques | FORC6814 | New | Selection for BSc Hon |
| Genetics | Advanced Forensic Techniques | FORC6824 | New | Selection for BSc Hon |
| Genetics | Forensic Chemistry Dissertation | FORC8900 | GEN720 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Genetics | Forensic Chemistry Thesis | FORC9100 | GDF920 | MSc Selection PhD or DSc, Permission from ADH |
| Genetics | Forensic Entomology Dissertation | FORE8900 | GEN727 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Genetics | Forensic Entomology Thesis | FORE9100 | GEN927 | MSc Selection PhD or DSc, Permission from ADH |
| Genetics | Research Essay | FORG6808 | GDF692 | FORG6816 |
| Genetics | Research: Literature Review | FORG6814 | GDF693 | Selection for BSc Hon |
| Genetics | Research Techniques | FORG6816 | GDF686 | Selection for BSc Hon |
| Genetics | Research: Literature Review | FORG6824 | GDF693 | Selection for BSc Hon |
| Genetics | Forensic Dna Typing And Quality Assurance | FORG6834 | GDF614 | Selection for BSc Hon |
| Genetics | Forensic Dna Typing And Quality Assurance | FORG6844 | GDF614 | Selection for BSc Hon |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|--------------------|--|----------|----------|--|
| Genetics | Crime Scene Management And The Justice System | FORG6854 | GDF624 | Selection for BSc Hon |
| Genetics | Crime Scene Management And The Justice System | FORG6864 | GDF624 | Selection for BSc Hon |
| Genetics | Capita Selecta In Forensic Genetics | FORG6874 | GDF674 | Selection for BSc Hon |
| Genetics | Capita Selecta In Forensic Genetics | FORG6884 | GDF674 | Selection for BSc Hon |
| Genetics | Forensics Genetics Dissertation | FORG8900 | GEN731 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Genetics | Forensic Sciences Interdisciplinary Dissertation | FORI8900 | GEN799 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Genetics | Forensic Sciences Interdisciplinary Thesis | FORI9100 | New | MSc Selection PhD or DSc, Permission from ADH |
| Genetics | Introduction To Forensic Sciences | FORS2616 | GDF214 | BLGY1513, BLGY1623, (CEM114 + CEM124 = 60%) |
| Genetics | Crime Scene Investigation | FORS2626 | GDF224 | BLGY1513, BLGY1623, (CEM114 + CEM124 = 60%) |
| Genetics | Evidence Types | FORS3714 | GDF314 | FORS2616, FORS2626 |
| Genetics | Forensic Chemistry | FORS3724 | GDF324 | FORS2626, CEM232 |
| Genetics | Forensic Entomology | FORS3734 | GDF334 | BLGY1663, FORS2616 |
| Genetics | Forensic Genetics | FORS3744 | GEN334 | FORS2616, GENE2626 |
| Genetics | Research Essay | FORS6808 | New | FORS6886 |
| Genetics | Research: Literature Review | FORS6814 | New | Selection for BSc Hon |
| Genetics | Research Techniques | FORS6816 | New | Selection for BSc Hon |
| Genetics | Research: Literature Review | FORS6824 | New | Selection for BSc Hon |
| Genetics | Management And Evaluation: Forensic Sciences | FORS6834 | New | Selection for BSc Hon |
| Genetics | Management And Evaluation: Forensic Sciences | FORS6844 | New | Selection for BSc Hon |
| Genetics | Crime To Court | FORS6854 | New | Selection for BSc Hon |
| Genetics | Crime To Court | FORS6864 | New | Selection for BSc Hon |
| Genetics | Capita Selecta In Forensic Sciences | FORS6874 | New | Selection for BSc Hon |
| Genetics | Capita Selecta In Forensic Sciences | FORS6884 | New | Selection for BSc Hon |
| Genetics | Forensic Sciences Dissertation | FORS8900 | GDF700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Genetics | Forensic Sciences Thesis | FORS9100 | GDF900 | MSc Selection PhD or DSc, Permission from ADH |
| Genetics | Advanced Behavioural Genetics | GENB6814 | GENB634 | Selection for BSc Hon |
| Genetics | Advanced Behavioural Genetics | GENB6824 | GENB634 | Selection for BSc Hon |
| Genetics | Advanced Cytotaxonomy | GENC6814 | GEN614 | Selection for BSc Hon |
| Genetics | Advanced Cytotaxonomy | GENC6824 | GEN614 | Selection for BSc Hon |
| Genetics | Human Genetics | GENE2616 | GEN216 | BLGY1513 + BLGY1626 |
| Genetics | Molecular Genetics | GENE2626 | GEN246 | BLGY1513, BLGY1623 |
| Genetics | Genomics | GENE3714 | | GENE2616 + GENE2626 |
| Genetics | Cytotaxonomy | GENE3724 | GEN324 | GENE2616 + GENE2626 |
| Genetics | Behavioural Genetics | GENE3734 | GEN354 | GENE2616 + GENE2626 |
| Genetics | Population And Conservation Genetics | GENE3744 | GEN344 | GENE2616 + GENE2626 |
| Genetics | Research Essay | GENE6808 | GEN692 | Selection for BSc Hon |
| Genetics | Research: Literature Review | GENE6814 | GEN693 | Selection for BSc Hon |
| Genetics | Research Techniques | GENE6816 | GEN686 | Selection for BSc Hon |
| Genetics | Research: Literature Review | GENE6824 | GEN693 | Selection for BSc Hon |
| Genetics | Capita Selecta Genetics | GENE6834 | GEN674 | Selection for BSc Hon |
| Genetics | Capita Selecta Genetics | GENE6844 | GEN674 | Selection for BSc Hon |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|--------------------|--|----------|----------|--|
| Genetics | Genetics Dissertation | GENG8900 | GEN700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Genetics | Genetics Thesis | GENG9100 | GEN900 | MSc Selection PhD or DSc, Permission from ADH |
| Genetics | Advanced Human Genetics | GENH6814 | GG5614 | Selection for BSc Hon |
| Genetics | Advanced Human Genetics | GENH6824 | GG5614 | Selection for BSc Hon |
| Genetics | Human Genetics Dissertation | GENH8900 | GG5700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Genetics | Human Genetics Thesis | GENH9100 | GG5900 | MSc Selection PhD or DSc, Permission from ADH |
| Genetics | Genetics Interdisciplinary Dissertation | GENI8900 | GEN799 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Genetics | Genetics Interdisciplinary Thesis | GENI9100 | New | MSc Selection PhD or DSc, Permission from ADH |
| Genetics | Recombinant Dna Technology | GENM6814 | GEN624 | Selection for BSc Hon |
| Genetics | Recombinant Dna Technology | GENM6824 | GEN624 | Selection for BSc Hon |
| Genetics | Applied Conservation Genetics | GENP6814 | GEN654 | Selection for BSc Hon |
| Genetics | Applied Conservation Genetics | GENP6824 | GEN654 | Selection for BSc Hon |
| Genetics | Advanced Molecular Systematics | GENS6814 | GEN644 | Selection for BSc Hon |
| Genetics | Advanced Molecular Systematics | GENS6824 | GEN644 | Selection for BSc Hon |
| Geography | Environmental Policy and Practice | ENVG6826 | GGF626 | GEOP3724 (GEO324) |
| Geography | Integrated Environmental Management | ENVG6846 | GGH666 | GEOP3724 (GEO324) |
| Geography | Environmental Sciences Dissertation | ENVR8900 | GEO700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Geography | Environmental Sciences Thesis | ENVR9100 | GEO900 | MSc Selection PhD or DSc, Permission from ADH |
| Geography | Theoretical Foundations of Geography | GEOF6816 | GEO616 | None |
| Geography | Capita Selecta Geography | GEOG6806 | GEO606 | None |
| Geography | Introduction to Human Geography | GEOH1624 | GEO124 | GEOP1514 (GEO114) |
| Geography | Housing and Urban development | GEOH2614 | GEO214 | GEOH1624 (GEO124) |
| Geography | Applied urban development and spatial transformation | GEOH3714 | GEO314 | GEOH2614 (GEO214) |
| Geography | Rural Geography | GEOH3724 | GEO344 | GEOH2614 (GEO214) |
| Geography | Urban Geography | GEOH6816 | GGH636 | GEOH3714 (GEO314) |
| Geography | Rural Geography | GEOH6826 | New | GEOH3724 |
| Geography | Introduction to Physical Geography | GEOP1514 | GEO114 | Maths level NCS level 4 |
| Geography | Process Geomorphology | GEOP2614 | GEO234 | GEOP1514 (GEO114) or GLG114 |
| Geography | Environment and climate studies | GEOP2624 | GEO224 | GEOP1514 (GEO114) |
| Geography | Environmental Geomorphology | GEOP3714 | GEO334 | GEOP2614 (GEO234) or GLG224 |
| Geography | Environmental management and analysis | GEOP3724 | GEO324 | GEOP2624 (GEO224) |
| Geography | Applied Geomorphology | GEOP6816 | GGF636 | GEOP3714 (GEO334) |
| Geography | Research in Geography | GEOR6808 | GEO692 | None |
| Geography | Geography Dissertation | GEOR8900 | GEO700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Geography | Geoinformatic Systems Dissertation | GEOR8900 | GEO700 | BSc in relevant discipline, Selection MSc, Permission from ADH |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|--------------------|---|----------|----------|--|
| Geography | Geography Thesis | GEOR9100 | GEO900 | MSc Selection PhD or DSc, Permission from ADH |
| Geography | Geoinformatics Systems Thesis | GEOR9100 | GEO900 | MSc Selection PhD or DSc, Permission from ADH |
| Geography | Introduction to Geographic Information Systems | GISC2624 | GIS224 | GEOP1514 (GEO114) and GEOH1624 (GEO124) |
| Geography | Professional practice, Ethics and legal aspects of Geographical Information Science | GISC3704 | GIS646 | GISC2624 (GIS224) |
| Geography | Geographical Information Science | GISC3724 | GIS324 | GISC2624 (GIS224) |
| Geography | Spatial analysis and modelling | GISC6816 | GIS616 | GISC3724 (GIS324) |
| Geography | Remote Sensing and Image interpretation | GISR6826 | GGF656 | GISC3724 (GIS324) |
| Geology | Geochemistry Dissertation | GECE8900 | GCE700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Geology | Geochemistry Thesis | GECE9100 | GCE900 | MSc Selection PhD or DSc, Permission from ADH |
| Geology | Overview of Geology Mining, Metallurgy and Business Processes | GLGA7913 | GLG711 | Selection for MRTM |
| Geology | Overview of Geology Mining, Metallurgy and Business Processes | GLGA7923 | GLG711 | Selection for MRTM |
| Geology | Mineral Resource Throughput Management 1 (Methodology) | GLGA7933 | GLG712 | Selection for MRTM |
| Geology | Mineral Resource Throughput Management 1 (Methodology) | GLGA7943 | GLG712 | Selection for MRTM |
| Geology | Applied Geology | GLGA7953 | GLG713 | Selection for MRTM |
| Geology | Applied Geology | GLGA7963 | GLG713 | Selection for MRTM |
| Geology | Applied Mining | GLGA7973 | GLG714 | Selection for MRTM |
| Geology | Applied Mining | GLGA7983 | GLG714 | Selection for MRTM |
| Geology | Applied Metallurgy | GLGB7913 | GLG715 | Selection for MRTM |
| Geology | Applied Metallurgy | GLGB7923 | GLG715 | Selection for MRTM |
| Geology | Mineral Resource Throughput Management Implementation Practices | GLGC7913 | GLG721 | Selection for MRTM |
| Geology | Mineral Resource Throughput Management Implementation Practices | GLGC7923 | GLG721 | Selection for MRTM |
| Geology | Mineral Resource Throughput Management Information Practices | GLGC7933 | GLG722 | Selection for MRTM |
| Geology | Mineral Resource Throughput Management Information Practices | GLGC7943 | GLG722 | Selection for MRTM |
| Geology | Mineral Resource Throughput Management Organisational Change Practices | GLGC7953 | GLG723 | Selection for MRTM |
| Geology | Mineral Resource Throughput Management Organisational Practices | GLGC7963 | GLG723 | Selection for MRTM |
| Geology | Virtual mining simulation and Optimisation | GLGC7973 | GLG724 | Selection for MRTM |
| Geology | Virtual mining simulation and Optimisation | GLGC7983 | GLG724 | Selection for MRTM |
| Geology | Mineral Resource Throughput Management 2 (advance) | GLGD7913 | GLG725 | Selection for MRTM |
| Geology | Mineral Resource Throughput Management 2 (advance) | GLGD7923 | GLG725 | Selection for MRTM |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|--------------------|---|----------|----------|--|
| Geology | Geological Modeling and applied Geostatistics | GLGD7933 | GLG726 | Selection for MRTM |
| Geology | Geological Modeling and applied Geostatistics | GLGD7943 | GLG726 | Selection for MRTM |
| Geology | Capita Selecta | GLGE7913 | GLG731 | Selection for MRTM |
| Geology | Capita Selecta | GLGE7923 | GLG731 | Selection for MRTM |
| Geology | Mining Throughput Accounting and Modelling | GLGE7933 | GLG732 | Selection for MRTM |
| Geology | Mining Throughput Accounting and Modelling | GLGE7943 | GLG732 | Selection for MRTM |
| Geology | Minerale hulpbron- en deurvloeibestuur Risk Practices | GLGE7953 | GLG733 | Selection for MRTM |
| Geology | Minerale hulpbron- en deurvloeibestuur Risk Practices | GLGE7963 | GLG733 | Selection for MRTM |
| Geology | Modern Mining Supply Chain Management | GLGE7973 | GLG734 | Selection for MRTM |
| Geology | Modern Mining Supply Chain Management | GLGE7983 | GLG734 | Selection for MRTM |
| Geology | Environmental Geology Dissertation | GLGE8900 | GLG700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Geology | Environmental Geology Thesis | GLGE9100 | GLG900 | MSc Selection PhD or DSc, Permission from ADH |
| Geology | Mineral Resource Throughput Management Dissertation | GLGF7910 | GLG791 | Selection for MRTM |
| Geology | Introduction to Geology | GLGY1614 | GLG114 | NSC mathematics level 5 physical science level 5 |
| Geology | General Geology | GLGY1624 | GLG124 | GLGY1614 |
| Geology | Geology of STHern Africa: genesis and age relationships | GLGY2602 | GLG202 | 55% average for GLGY1614 + GLGY1624 |
| Geology | Petrographical mineralogy | GLGY2612 | GLG212 | 55% average for GLGY1614 + GLGY1624 |
| Geology | Advanced mineralogy | GLGY2614 | GLG214 | 55% average for GLGY1614 + GLGY1624 |
| Geology | Sedimentological applications | GLGY2622 | GLG222 | 55% average for GLGY1614 + GLGY1624 |
| Geology | Advanced Sedimentology | GLGY2624 | GLG224 | 55% average for GLGY1614 + GLGY1624 |
| Geology | Geological techniques: uses and applications | GLGY2632 | GLG232 | 55% average for GLGY1614 + GLGY1624 |
| Geology | Geology for Engineering Practical | GLGY2641 | | Selection: BSc majoring in Physics and Engineering subjects |
| Geology | Geological Environmental Management | GLGY2642 | GLG242 | 55% average for GLGY1614 + GLGY1624 |
| Geology | Geology for Engineering | GLGY2643 | | Selection: BSc majoring in Physics and Engineering subjects |
| Geology | Environmental Geology | GLGY2644 | GLG244 | 55% average for GLGY1614 + GLGY1624 or GEOH1614 + GEOH1624 |
| Geology | Geological structures and maps | GLGY2652 | GLG252 | 55% average for GLGY1614 + GLGY1624 |
| Geology | Igneous Petrology | GLGY3714 | GLG314 | GLGY2614 & GLGY2612 |
| Geology | Economic and exploration Geology | GLGY3724 | GLG324 | GLGY2624 & GLGY2622 |
| Geology | Advanced structural Geology | GLGY3734 | GLG334 | GLGY2652, GLGY2624 & GLGY2622 |
| Geology | Metamorphic petrology | GLGY3744 | GLG344 | GLGY2624 & GLGY3714 |
| Geology | Introduction to Geochemistry | GLGY3754 | GLG354 | GLGY2614 |
| Geology | Exploration Geochemistry | GLGY3764 | GLG364 | GLGY2614 |
| Geology | Petrochemical applications | GLGY3774 | GLG374 | GLGY2614 |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|-----------------------------------|---|----------|----------|---|
| Geology | Environmental Geochemistry | GLGY3784 | GLG384 | GLGY2614 |
| Geology | Plate Tectonics | GLGY6816 | GLG616 | Selection for Honours |
| Geology | SEDIMENTOLOGY | GLGY6823 | GLG623 | Approval to register for BScHon in Geology programmes |
| Geology | ECONOMIC GEOLOGY | GLGY6826 | GLG626 | Approval to register for BScHon in Geology programmes |
| Geology | Mineralogy | GLGY6836 | GLG636 | Selection for Honours |
| Geology | METAMORPHIC GEOLOGY | GLGY6843 | GLG643 | Approval to register for BScHon in Geology programmes |
| Geology | ADVANCED GEOCHEMISTRY | GLGY6846 | GLG646 | Approval to register for BScHon in Geology programmes & GLGY3754, GLGY3774 & GLGY3784 |
| Geology | IGNEOUS GEOLOGY | GLGY6853 | GLG653 | Approval to register for BScHon in Geology programmes |
| Geology | Structural Geology | GLGY6856 | GLG656 | Selection for Honours + GLGY3734 |
| Geology | MINERAL EXPLORATION | GLGY6863 | GLG663 | Approval to register for BScHon in Geology programmes |
| Geology | ENVIRONMENTAL GEOCHEMISTRY | GLGY6873 | GLG673 | Approval to register for BScHon in Geology programmes |
| Geology | CAPITA SELECTA | GLGY6883 | GLG683 | Approval to register for BScHon in Geology programmes |
| Geology | RESEARCH ESSAY | GLGY6896 | GLG696 | Approval to register for BScHon in Geology programmes |
| Geology | Geology Dissertation | GLGY8900 | GLG700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Geology | Geology Thesis | GLGY9100 | GLG900 | MSc Selection PhD or DSc, Permission from ADH |
| Geology | Mineral Resource Throughput Thesis | MRTH9100 | GLG900 | MSc Selection PhD or DSc, Permission from ADH |
| Geology | Mineral Resource Throughput Management Dissertation | MRTM8900 | MRM700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Geology | Mineral Resource Throughput Management Thesis | MRTM9100 | MRM900 | MSc Selection PhD or DSc, Permission from ADH |
| Haematology and Cell Biology | HUMAN MOLECULAR BIOLOGY OF DIETETICS | HMBG2614 | MBG214 | BLGY1513 |
| Haematology and Cell Biology | HUMAN MOLECULAR BIOLOGY OF NUTRITIONAL DISORDERS | HMBG3714 | MBG314 | 60% GENE2616 + 60% GENE2626 |
| Haematology and Cell Biology | HUAN MOLECULAR BIOLOGY OF CANCER | HMBG3724 | MBG324 | 60% GENE2616 + 60% GENE2626 |
| Haematology and Cell Biology | HUMAN MOLECULAR BIOLOGY OF CHROMOSOMES | HMBG3734 | MBG334 | 60% GENE2616 + 60% GENE2626 |
| Haematology and Cell Biology | HUMAN MOLECULAR BIOLOGY OF IMMUNOLOGY AND HAEMOSTASIS | HMBG3744 | MBG344 | 60% GENE2616 + 60% GENE2626 |
| Institute for Groundwater Studies | Geohydrology Dissertation | GEHR8900 | GHR700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Institute for Groundwater Studies | Geohydrology Thesis | GEHR9100 | GHR900 | MSc Selection PhD or DSc, Permission from ADH |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|-----------------------------------|-----------------------------------|----------|----------|--|
| Institute for Groundwater Studies | Groundwater Hydrolics | GEOH6815 | GHR611 | Approval to register for BScHon in Geohydrology programmes. The prerequisite modules of the UFS are listed below. The equivalent modules from other universities at the same NQF level (7) are also accepted. GLG114 (Introduction to Geology) GLG124 (General Geology) CEM114 (Inorganic and Analytical Chemistry) CEM124/CEM124 (Physical and Organic Chemistry) and WTW114 (Calculus) WTW124 (Algebra and Differential Equations) or STK114 (Introduction to Statistics I) STK124 (Introduction to Statistics II) |
| Institute for Groundwater Studies | Hydrochemistry and Pollution | GEOH6835 | GHR612 | Approval to register for BScHon in Geohydrology programmes. The prerequisite modules of the UFS are listed below. The equivalent modules from other universities at the same NQF level (7) are also accepted. GLG114 (Introduction to Geology) GLG124 (General Geology) CEM114 (Inorganic and Analytical Chemistry) CEM124/CEM124 (Physical and Organic Chemistry) and WTW114 (Calculus) WTW124 (Algebra and Differential Equations) or STK114 (Introduction to Statistics I) STK124 (Introduction to Statistics II) |
| Institute for Groundwater Studies | Mining Geohydrology and Hydrology | GEOH6845 | GHR628 | Approval to register for BScHon in Geohydrology programmes. The prerequisite modules of the UFS are listed below. The equivalent modules from other universities at the same NQF level (7) are also accepted. GLG114 (Introduction to Geology) GLG124 (General Geology) CEM114 (Inorganic and Analytical Chemistry) CEM124/CEM124 (Physical and Organic Chemistry) and WTW114 (Calculus) WTW124 (Algebra and Differential Equations) or STK114 (Introduction to Statistics I) STK124 (Introduction to Statistics II) |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|--|----------|----------|--|
| Institute for Groundwater Studies | Groundwater Geophysics | GEOH6855 | GHR613 | Approval to register for BScHon in Geohydrology programmes. The prerequisite modules of the UFS are listed below. The equivalent modules from other universities at the same NQF level (7) are also accepted. GLG114 (Introduction to Geology) GLG124 (General Geology) CEM114 (Inorganic and Analytical Chemistry) CEM124/CEM124 (Physical and Organic Chemistry) and WTW114 (Calculus) WTW124 (Algebra and Differential Equations) or STK114 (Introduction to Statistics I) STK124 (Introduction to Statistics II) |
| Institute for Groundwater Studies | Groundwater Management | GEOH6865 | GHR622 | Approval to register for BScHon in Geohydrology programmes. The prerequisite modules of the UFS are listed below. The equivalent modules from other universities at the same NQF level (7) are also accepted. GLG114 (Introduction to Geology) GLG124 (General Geology) CEM114 (Inorganic and Analytical Chemistry) CEM124/CEM124 (Physical and Organic Chemistry) and WTW114 (Calculus) WTW124 (Algebra and Differential Equations) or STK114 (Introduction to Statistics I) STK124 (Introduction to Statistics II) |
| Mathematical Statistics and Actuarial Science | Actuarial Economics | ACDE1710 | | Various; consult Programme Director |
| Mathematical Statistics and Actuarial Science | Actuarial Financial Management and Reporting | ACDF1626 | | Various; consult Programme Director |
| Mathematical Statistics and Actuarial Science | Actuarial Financial Mathematics | ACDF1726 | | Various; consult Programme Director |
| Mathematical Statistics and Actuarial Science | Actuarial Financial Economics | ACDF2726 | | Various; consult Programme Director |
| Mathematical Statistics and Actuarial Science | Actuarial Models | ACDL2726 | | Various; consult Programme Director |
| Mathematical Statistics and Actuarial Science | Actuarial Contingencies | ACDL2815 | | Various; consult Programme Director |
| Mathematical Statistics and Actuarial Science | Actuarial Mathematical Statistics | ACDS1710 | | Various; consult Programme Director |
| Mathematical Statistics and Actuarial Science | Actuarial Statistical Methods | ACDS2716 | | Various; consult Programme Director |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|--|----------|----------|---|
| Mathematical Statistics and Actuarial Science | Actuarial Economics Summary | ACEE1711 | | ACDE1710 |
| Mathematical Statistics and Actuarial Science | Actuarial Financial Management and Reporting Summary | ACEF1621 | | ACDF1626 |
| Mathematical Statistics and Actuarial Science | Actuarial Financial Mathematics Summary | ACEF1721 | | ACDF1726 |
| Mathematical Statistics and Actuarial Science | Actuarial Financial Economics Summary | ACEF2721 | | ACDF2726 |
| Mathematical Statistics and Actuarial Science | Actuarial Models Summary | ACEL2721 | | ACDL2726 |
| Mathematical Statistics and Actuarial Science | Actuarial Contingencies Summary | ACEL2811 | | ACDL2815 |
| Mathematical Statistics and Actuarial Science | Actuarial Mathematical Statistics Summary | ACES1711 | | ACDS1710 |
| Mathematical Statistics and Actuarial Science | Actuarial Statistical Methods Summary | ACES2711 | | ACDS2716 |
| Mathematical Statistics and Actuarial Science | Specialist Employee Benefits | ACSB7920 | | 5 exemptions from Actuarial Society of STH Africa subjects |
| Mathematical Statistics and Actuarial Science | Actuarial Communications | ACSC6825 | | 4 exemptions from Actuarial Society of STH Africa subjects |
| Mathematical Statistics and Actuarial Science | Dissertation | ACSD7900 | | BSc Hons (Actuarial Science); Permission from HoD |
| Mathematical Statistics and Actuarial Science | Actuarial Financial Management | ACSF1614 | | National Senior Certificate (NCS) Mathematics on performance level 5 (60%) or WTW164/WTW164 or WTW184 |
| Mathematical Statistics and Actuarial Science | Actuarial Financial Reporting | ACSF1622 | | National Senior Certificate (NCS) Mathematics on performance level 5 (60%) or WTW164/WTW164 or WTW184 |
| Mathematical Statistics and Actuarial Science | Advanced Financial Mathematics | ACSF2746 | | 60% in ATW216 |
| Mathematical Statistics and Actuarial Science | Actuarial Financial Economics | ACSF3706 | | WTW214, WTW244, ATW246 |
| Mathematical Statistics and Actuarial Science | Introduction to Actuarial Science | ACSG1624 | | National Senior Certificate (NCS) Mathematics on performance level 5 (60%) or WTW164/WTW164 or WTW184 |
| Mathematical Statistics and Actuarial Science | Actuarial Asset and Liability Management | ACSG6800 | | 5 exemptions from Actuarial Society of STH Africa subjects |
| Mathematical Statistics and Actuarial Science | Actuarial Asset and Liability Management | ACSG7900 | | 5 exemptions from Actuarial Society of STH Africa subjects |
| Mathematical Statistics and Actuarial Science | Specialist General Insurance | ACSG7920 | | 5 exemptions from Actuarial Society of STH Africa subjects |
| Mathematical Statistics and Actuarial Science | Specialist Health Insurance | ACSH7910 | | 5 exemptions from Actuarial Society of STH Africa subjects |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|--|-----------|----------|---|
| Mathematical Statistics and Actuarial Science | Specialist Investments | ACSI7920 | | 5 exemptions from Actuarial Society of STH Africa subjects |
| Mathematical Statistics and Actuarial Science | Actuarial Models | ACSL3706 | | ATW246 |
| Mathematical Statistics and Actuarial Science | Actuarial Contingencies | ACSL6815 | | 4 exemptions from Actuarial Society of STH Africa subjects |
| Mathematical Statistics and Actuarial Science | Specialist Life Insurance | ACSL7910 | | 5 exemptions from Actuarial Society of STH Africa subjects |
| Mathematical Statistics and Actuarial Science | Actuarial Modelling and Literature Study | ACSR6808 | | BSc (Actuarial Science) |
| Mathematical Statistics and Actuarial Science | Short Dissertation | ACSR7900 | | BSc Hons (Actuarial Science), 65% for ACSR6808 |
| Mathematical Statistics and Actuarial Science | Actuarial Statistical Methods | ACSS3716 | | ATW246 and WKS226 |
| Mathematical Statistics and Actuarial Science | Actuarial Science Dissertation | ACST8900 | | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Mathematical Statistics and Actuarial Science | Actuarial Science Thesis | ACST9100 | | MSc Selection PhD or DSc, Permission from ADH |
| Mathematical Statistics and Actuarial Science | Business Calculations I | EBCS51405 | | National Senior Certificate (NCS) Mathematics on performance level 3 (40%) |
| Mathematical Statistics and Actuarial Science | Business Calculations II | EBCS52405 | | National Senior Certificate (NCS) Mathematics on performance level 3 (40%) |
| Mathematical Statistics and Actuarial Science | Business Calculations I | ECPM51405 | | |
| Mathematical Statistics and Actuarial Science | Business Calculations I | EFBC51405 | | National Senior Certificate (NCS) Mathematics on performance level 3 (40%) |
| Mathematical Statistics and Actuarial Science | Introduction to Investment Science | ICSI1624 | | National Senior Certificate (NCS) Mathematics on performance level 5 (60%) or WTW164/WTW164 or WTW184 |
| Mathematical Statistics and Actuarial Science | Investment Science | ISCI3714 | | ISC164 and (ATW226 or ATW246) |
| Mathematical Statistics and Actuarial Science | Introduction to Statistics | STSA1624 | | Equivalent module: BMT124 |
| Mathematical Statistics and Actuarial Science | Multiple Regression Analysis | STSA2616 | | STK124 or EBSC52405 |
| Mathematical Statistics and Actuarial Science | Multiple Regression: Variance and time series analysis | STSA2626 | | STK216 |
| Mathematical Statistics and Actuarial Science | Probability (I) | STSA3716 | | STK124 and (WTW114 or WTW134) |
| Mathematical Statistics and Actuarial Science | Probability (II) | STSA3726 | | STK316 |
| Mathematical Statistics and Actuarial Science | Applied Statistics I | STSA3732 | | STK226 |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|---------------------------|----------|----------|---|
| Mathematical Statistics and Actuarial Science | Applied Statistics II | STSA3742 | | STK332 |
| Mathematical Statistics and Actuarial Science | Multivariate Methods | STSA6815 | STS616 | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344) |
| Mathematical Statistics and Actuarial Science | Data Mining | STSA6825 | STS628 | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344) |
| Mathematical Statistics and Actuarial Science | Multivariate Methods | STSA7910 | STS716 | This module may not be registered if STS616 has already been completed. |
| Mathematical Statistics and Actuarial Science | Statistics Thesis | STSA9100 | | MSc Selection PhD or DSc, Permission from ADH |
| Mathematical Statistics and Actuarial Science | Bayes Analysis | STSB6815 | STS611 | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344) |
| Mathematical Statistics and Actuarial Science | Bayes Analysis | STSB7910 | STS711 | This module may not be registered if STS611 has already been completed. |
| Mathematical Statistics and Actuarial Science | Categorical Data Analysis | STSC6815 | STS618 | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344) |
| Mathematical Statistics and Actuarial Science | Categorical Data Analysis | STSC7910 | STS718 | This module may not be registered if STS618 has already been completed |
| Mathematical Statistics and Actuarial Science | Dissertation | STSD7900 | STS791 | BSc Hons (Statistic or Mathematical Statistics); Permission from HoD |
| Mathematical Statistics and Actuarial Science | Modelling Extreme Values | STSE6815 | STS626 | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344). STS614 is recommended, but not compulsory |
| Mathematical Statistics and Actuarial Science | Modelling Extreme Values | STSE7910 | STS726 | This module may not be registered if STS626 has already been completed. |
| Mathematical Statistics and Actuarial Science | Financial Time Series | STSF6815 | STS615 | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344) |
| Mathematical Statistics and Actuarial Science | Risk Analysis | STSF6825 | STS621 | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344) |
| Mathematical Statistics and Actuarial Science | Econometrics | STSF6865 | STS623 | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344) |
| Mathematical Statistics and Actuarial Science | Financial Time Series | STSF7910 | STS715 | This module may not be registered if STS615 has already been completed. |
| Mathematical Statistics and Actuarial Science | Risk Analysis | STSF7920 | STS721 | This module may not be registered if STS621 has already been completed |
| Mathematical Statistics and Actuarial Science | Econometrics | STSF7940 | STS723 | This module may not be registered if STS623 has already been completed. |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|--|----------|----------|---|
| Mathematical Statistics and Actuarial Science | Statistics for Law I | STSL1514 | | |
| Mathematical Statistics and Actuarial Science | Statistics for Law II | STSL1524 | | |
| Mathematical Statistics and Actuarial Science | Introductory Probability Theory | STSM1624 | | WKS114 and (WTW114 or 75% in WTW134) |
| Mathematical Statistics and Actuarial Science | Sample distribution theory and inference | STSM2616 | | WKS124 |
| Mathematical Statistics and Actuarial Science | Bayesian Statistical Inference | STSM2626 | | WKS216 |
| Mathematical Statistics and Actuarial Science | Inference | STSM3714 | | WKS226 |
| Mathematical Statistics and Actuarial Science | Multivariate Analysis | STSM3724 | | WTW124 and WKS314 |
| Mathematical Statistics and Actuarial Science | Multiple Regression | STSM3734 | | WTW124 and WKS226 |
| Mathematical Statistics and Actuarial Science | Time series analysis | STSM3744 | | WKS314 and WKS334 |
| Mathematical Statistics and Actuarial Science | Regression Analysis | STSM6815 | STS612 | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344) |
| Mathematical Statistics and Actuarial Science | Generalised Linear Models | STSM6825 | STS624 | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344) |
| Mathematical Statistics and Actuarial Science | Mixed Linear Models | STSM6845 | STS627 | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344) |
| Mathematical Statistics and Actuarial Science | Generalised Linear Models | STSM7920 | STS724 | This module may not be registered if STS624 has already been completed. |
| Mathematical Statistics and Actuarial Science | Mixed Linear Models | STSM7940 | STS727 | This module may not be registered if STS627 has already been completed. |
| Mathematical Statistics and Actuarial Science | Stochastic Processes | STSP6815 | STS613 | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344) |
| Mathematical Statistics and Actuarial Science | Statistical Programming | STSP6825 | STS625 | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344) and (WTW254 or STS614) |
| Mathematical Statistics and Actuarial Science | Stochastic Processes | STSP7910 | STS713 | This module may not be registered if STS613 has already been completed. |
| Mathematical Statistics and Actuarial Science | Statistical Programming | STSP7920 | STS725 | WTW254 or STS614 or STS714. This module may not be registered if STS625 has already been completed. |
| Mathematical Statistics and Actuarial Science | Statistical Modelling and Literature Study | STSR6808 | STS692 | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344) |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|--------------------------------------|----------|----------|--|
| Mathematical Statistics and Actuarial Science | Reliability and Survival Analysis | STSR6825 | STS622 | STS613 |
| Mathematical Statistics and Actuarial Science | Short Dissertation | STSR7900 | STS791 | BSc Hons (Statistics or Mathematical Statistics); 65% for STS692 |
| Mathematical Statistics and Actuarial Science | Reliability and Survival Analysis | STSR7910 | STS722 | STS613 or STS713 |
| Mathematical Statistics and Actuarial Science | Stochastic Simulation | STSS6815 | STS614 | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344) |
| Mathematical Statistics and Actuarial Science | Sampling Techniques | STSS6825 | | WTW114 and WTW124, as well as a minimum average mark of 65% in (STK216+226+316+326) or 60% in (WKS314+324+334+344) |
| Mathematical Statistics and Actuarial Science | Stochastic Simulation | STSS7910 | STS714 | This module may not be registered if STS614 has already been completed. |
| Mathematical Statistics and Actuarial Science | Sampling Techniques | STSS7920 | | This module may not be registered if STS641 has already been completed. |
| Mathematical Statistics and Actuarial Science | Mathematical Statistics Dissertation | STST8900 | | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Mathematical Statistics and Actuarial Science | Statistics Thesis | STST9100 | | MSc Selection PhD or DSc, Permission from ADH |
| Mathematical Statistics and Actuarial Science | Capita Selecta | STSX6815 | STS629 | As per selected module |
| Mathematical Statistics and Actuarial Science | Capita Selecta | STSX6825 | STS629 | As per selected module |
| Mathematical Statistics and Actuarial Science | Capita Selecta | STSX7910 | STS729 | As per selected module |
| Mathematical Statistics and Actuarial Science | Capita Selecta | STSX7920 | STS729 | As per selected module |
| Mathematical Statistics and Actuarial Science | Introductory Financial Mathematics | Various | ACSF2716 | WKS (114 & 124) and (WTW114 & WTW124) |
| Mathematical Statistics and Actuarial Science | Financial Mathematics | Various | ACSF2726 | ATW216 |
| Mathematical Statistics and Actuarial Science | Introductory Statistics | Various | STSM1614 | NCS Mathematics level 6 (70%) or at least 60% in WTW164/WTW164 or a pass in WTW184 or WTW134 |
| Mathematical Statistics and Actuarial Science | Introductory Biostatistics | | | Equivalent modules: STK124, EBCS52405 |
| Mathematics and Applied Mathematics | Discrete Mathematics | MATM3734 | WTW334 | WTW214 & minimum 40% in WTW264 |
| Mathematics and Applied Mathematics | Engineering statics | MATA1614 | TGW114 | NSC Maths level 5 |
| Mathematics and Applied Mathematics | Engineering Dynamics | MATA1624 | TGW124 | MATA1614 |
| Mathematics and Applied Mathematics | Dynamics of rigid bodies | MATA2614 | TGW214 | MATA1624 |
| Mathematics and Applied Mathematics | Mathematical Modeling | MATA2634 | WTW234 | minimum 40% in WTW114 of WTW134 en minimum 40% in WTW114 of WTW144 |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|-------------------------------------|----------------------------------|----------|-----------------|--|
| Mathematics and Applied Mathematics | Ordinary differential equations | MATA2644 | WTW244 | WTW124 of WTW144 |
| Mathematics and Applied Mathematics | Industrial Mathematics | MATA3764 | WTW364 | WTW214, WTW224 & WTW274 & minimum 40% in WTW234 |
| Mathematics and Applied Mathematics | Numerical Analysis | MATA3774 | WTW374 | WTW124 & WTW254 |
| Mathematics and Applied Mathematics | Dynamical Systems | MATA3784 | WTW384 | WTW244 |
| Mathematics and Applied Mathematics | Algebra | MATA6814 | WTW601 | Selection BSc |
| Mathematics and Applied Mathematics | Algebra | MATA6824 | WTW601 | Selection BSc |
| Mathematics and Applied Mathematics | algebra | MATA7914 | WTW701 | Selection MSc |
| Mathematics and Applied Mathematics | algebra | MATA7924 | WTW701 | Selection MSc |
| Mathematics and Applied Mathematics | Applied Mathematics Dissertation | MATA8900 | WTW700/ MTHA700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Mathematics and Applied Mathematics | Mathematics Thesis | MATA9100 | WTW900 | MSc Selection PhD or DSc, Permission from ADH |
| Mathematics and Applied Mathematics | Galois theory | MATB6814 | WTW602 | Selection BSc |
| Mathematics and Applied Mathematics | Galois theory | MATB6824 | WTW602 | Selection BSc |
| Mathematics and Applied Mathematics | Galois theory | MATB7914 | WTW702 | Selection MSc |
| Mathematics and Applied Mathematics | Galois theory | MATB7924 | WTW702 | Selection MSc |
| Mathematics and Applied Mathematics | Topology | MATC6814 | WTW603 | Selection BSc |
| Mathematics and Applied Mathematics | Topology | MATC6824 | WTW603 | Selection BSc |
| Mathematics and Applied Mathematics | Topology | MATC7914 | WTW703 | Selection MSc |
| Mathematics and Applied Mathematics | Topology | MATC7924 | WTW703 | Selection MSc |
| Mathematics and Applied Mathematics | modern topology | MATD6814 | WTW604 | Selection BSc |
| Mathematics and Applied Mathematics | modern topology | MATD6824 | WTW604 | Selection BSc |
| Mathematics and Applied Mathematics | modern topology | MATD7914 | WTW704 | Selection MSc |
| Mathematics and Applied Mathematics | modern topology | MATD7924 | WTW704 | Selection MSc |
| Mathematics and Applied Mathematics | functional analysis | MATE6814 | WTW605 | Selection BSc |
| Mathematics and Applied Mathematics | functional analysis | MATE6824 | WTW605 | Selection BSc |
| Mathematics and Applied Mathematics | functional analysis | MATE7914 | WTW705 | Selection MSC |
| Mathematics and Applied Mathematics | functional analysis | MATE7924 | WTW705 | Selection MSC |
| Mathematics and Applied Mathematics | Measure and integration theory | MATF6814 | WTW606 | Selection BSc |
| Mathematics and Applied Mathematics | Measure and integration theory | MATF6824 | WTW606 | Selection BSc |
| Mathematics and Applied Mathematics | Measure and integration theory | MATF7914 | WTW706 | Selection MSc |
| Mathematics and Applied Mathematics | Measure and integration theory | MATF7924 | WTW706 | Selection MSc |
| Mathematics and Applied Mathematics | coding theory | MATG6814 | WTW607 | Selection BSc |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|-------------------------------------|-----------------------------|----------|----------|--|
| Mathematics and Applied Mathematics | coding theory | MATG6824 | WTW607 | Selection BSc |
| Mathematics and Applied Mathematics | coding theory | MATG7914 | WTW707 | Selection MSc |
| Mathematics and Applied Mathematics | coding theory | MATG7924 | WTW707 | Selection MSc |
| Mathematics and Applied Mathematics | Discrete Mathematics | MATH6814 | WTW608 | Selection BSc |
| Mathematics and Applied Mathematics | Discrete Mathematics | MATH6824 | WTW608 | Selection BSc |
| Mathematics and Applied Mathematics | Discrete Mathematics | MATH7914 | WTW708 | Selection MSc |
| Mathematics and Applied Mathematics | Discrete Mathematics | MATH7924 | WTW708 | Selection MSc |
| Mathematics and Applied Mathematics | Set theory | MAT16814 | WTW609 | Selection BSc |
| Mathematics and Applied Mathematics | Set theory | MAT16824 | WTW609 | Selection BSc |
| Mathematics and Applied Mathematics | Set theory | MAT17914 | WTW709 | Selection MSc |
| Mathematics and Applied Mathematics | Set theory | MAT17924 | WTW709 | Selection MSc |
| Mathematics and Applied Mathematics | Group Theory | MATJ6814 | WTW610 | Selection BSc |
| Mathematics and Applied Mathematics | Group Theory | MATJ6824 | WTW610 | Selection BSc |
| Mathematics and Applied Mathematics | Group Theory | MATJ7914 | WTW710 | Selection MSc |
| Mathematics and Applied Mathematics | Group Theory | MATJ7924 | WTW710 | Selection MSc |
| Mathematics and Applied Mathematics | Ring theory | MATK6814 | WTW611 | Selection BSc |
| Mathematics and Applied Mathematics | Ring theory | MATK6824 | WTW611 | Selection BSc |
| Mathematics and Applied Mathematics | Ring theory | MATK7914 | WTW711 | Selection MSc |
| Mathematics and Applied Mathematics | Ring theory | MATK7924 | WTW711 | Selection MSc |
| Mathematics and Applied Mathematics | Category theory | MATL6814 | WTW612 | Selection BSc |
| Mathematics and Applied Mathematics | Category theory | MATL6824 | WTW612 | Selection BSc |
| Mathematics and Applied Mathematics | Category theory | MATL7914 | WTW712 | Selection MSc |
| Mathematics and Applied Mathematics | Category theory | MATL7924 | WTW712 | Selection MSc |
| Mathematics and Applied Mathematics | Calculus | MATM1534 | WTW134 | Mathematics on performance level 5 (60%) or WTW164/WTW164 or WTW184 |
| Mathematics and Applied Mathematics | Calculus and linear algebra | MATM1544 | WTW144 | WTW134 or at least 40% in WTW114 |
| Mathematics and Applied Mathematics | Precalculus I | MATM1574 | WTW174 | National Senior Certificate (NCS) Mathematics on performance level 4 (50%) |
| Mathematics and Applied Mathematics | Precalculus II | MATM1584 | WTW184 | WTW174 |
| Mathematics and Applied Mathematics | Calculus | MATM1614 | WTW114 | National Senior Certificate Mathematics performance level 7 or at least 75% in MATD1564 or at least 65% in MATM1584 or at least 50% in MATM1534 AND at least 60% in a Departmental admission test. |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|-------------------------------------|--|----------|--------------------|---|
| Mathematics and Applied Mathematics | Algebra and differential equations | MATM1624 | WTW124 | At least 40% in WTW114 |
| Mathematics and Applied Mathematics | Introductory calculus and statics for Architecture, Quantity Surveying and Construction Management | MATM1542 | WTW142 | National Senior Certificate (NCS) Mathematics on performance level 5 (60%) or WTW164/WTW164 or WTW184 |
| Mathematics and Applied Mathematics | Vector analysis | MATM2614 | WTW214 | WTW 114 & minimum 40% in WTW124 |
| Mathematics and Applied Mathematics | Scientific Computing | MATM2654 | WTW254 | WTW124 of WTW144 |
| Mathematics and Applied Mathematics | Sequences and series | MATM2664 | WTW264 | WTW114 & WTW124 |
| Mathematics and Applied Mathematics | Complex analysis | MATM3714 | WTW314 | WTW124 & WTW214 & minimum 40% in WTW264 |
| Mathematics and Applied Mathematics | Real analysis | MATM3724 | WTW324 | WTW214 & minimum 40% in WTW264 |
| Mathematics and Applied Mathematics | Algebra | MATM3744 | WTW344 | WTW124 & WTW214 & minimum 40% in WTW264 |
| Mathematics and Applied Mathematics | Method of Mathematics | MATM6814 | WTW613 | Selection BSc |
| Mathematics and Applied Mathematics | MATHEMATICS THESIS | MATM6816 | WTW692 | B Sc (Hon) |
| Mathematics and Applied Mathematics | Method of Mathematics | MATM6824 | WTW613 | Selection BSc |
| Mathematics and Applied Mathematics | MATHEMATICS THESIS | MATM6828 | WTW692 | B Sc (Hon) |
| Mathematics and Applied Mathematics | MATHEMATICS THESIS | MATM7910 | WTW792 | MSc |
| Mathematics and Applied Mathematics | Method of Mathematics | MATM7914 | WTW713 | Selection MSc |
| Mathematics and Applied Mathematics | Mathematics Thesis | MATM7920 | WTW792 | MSc |
| Mathematics and Applied Mathematics | Method of Mathematics | MATM7924 | WTW713 | Selection MSc |
| Mathematics and Applied Mathematics | Mathematics Dissertation | MATM8900 | WTW700/ MTHA700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Mathematics and Applied Mathematics | Mathematics Thesis | MATM9100 | WTW900 | MSc Selection PhD or DSc, Permission from ADH |
| Mathematics and Applied Mathematics | digital image processing | MATN6814 | WTW614 | Selection BSc |
| Mathematics and Applied Mathematics | digital image processing | MATN6824 | WTW614 | Selection BSc |
| Mathematics and Applied Mathematics | digital image processing | MATN7914 | WTW714 | Selection MSc |
| Mathematics and Applied Mathematics | digital image processing | MATN7924 | WTW714 | Selection MSc |
| Mathematics and Applied Mathematics | Numerical linear algebra | MATO6814 | WTW615 | Selection BSc |
| Mathematics and Applied Mathematics | Numerical linear algebra | MATO6824 | WTW615 | Selection BSc |
| Mathematics and Applied Mathematics | Numerical linear algebra | MATO7914 | WTW715 | Selection MSc |
| Mathematics and Applied Mathematics | Numerical linear algebra | MATO7924 | WTW715 | Selection MSc |
| Mathematics and Applied Mathematics | numerical solution of differential equations | MATP6814 | WTW616 | Selection BSc |
| Mathematics and Applied Mathematics | numerical solution of differential equations | MATP6824 | WTW616 | Selection BSc |
| Mathematics and Applied Mathematics | numerical solution of differential equations | MATP7914 | WTW716 | Selection MSc |
| Mathematics and Applied Mathematics | numerical solution of differential equations | MATP7924 | WTW716 | Selection MSc |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|-------------------------------------|--------------------------------|----------|----------|--|
| Mathematics and Applied Mathematics | Optimisation | MATQ6814 | WTW617 | Selection BSc |
| Mathematics and Applied Mathematics | Optimisation | MATQ6824 | WTW617 | Selection BSc |
| Mathematics and Applied Mathematics | Optimisation | MATQ7914 | WTW717 | Selection MSC |
| Mathematics and Applied Mathematics | Optimisation | MATQ7924 | WTW717 | Selection MSC |
| Mathematics and Applied Mathematics | Calculus | MATR1534 | WTW134 | Mathematics on performance level 5 (60%) or WTW164/WTW164 or WTW184 |
| Mathematics and Applied Mathematics | Calculus | MATR1614 | WTW114 | NSC Maths level 7 or at least 75% in WTW164/WTW164 or at least 65% in WTW184 or at least 50% in WTW134 |
| Mathematics and Applied Mathematics | Cryptography | MATR6814 | WTW618 | Selection BSc |
| Mathematics and Applied Mathematics | Cryptography | MATR6824 | WTW618 | Selection BSc |
| Mathematics and Applied Mathematics | Cryptography | MATR7914 | WTW718 | Selection MSC |
| Mathematics and Applied Mathematics | Cryptography | MATR7924 | WTW718 | Selection MSC |
| Mathematics and Applied Mathematics | Partial differential equations | MATS6814 | WTW619 | Selection BSc |
| Mathematics and Applied Mathematics | Partial differential equations | MATS6824 | WTW619 | Selection BSc |
| Mathematics and Applied Mathematics | Partial differential equations | MATS7914 | WTW719 | Selection MSC |
| Mathematics and Applied Mathematics | Partial differential equations | MATS7924 | WTW719 | Selection MSC |
| Mathematics and Applied Mathematics | Fluid Mechanics | MATT6814 | WTW620 | Selection BSc |
| Mathematics and Applied Mathematics | Fluid Mechanics | MATT6824 | WTW620 | Selection BSc |
| Mathematics and Applied Mathematics | Fluid Mechanics | MATT7914 | WTW720 | Selection MSC |
| Mathematics and Applied Mathematics | Fluid Mechanics | MATT7924 | WTW720 | Selection MSC |
| Mathematics and Applied Mathematics | Biological Modelling | MATU6814 | WTW621 | Selection BSc |
| Mathematics and Applied Mathematics | Biological Modelling | MATU6824 | WTW621 | Selection BSc |
| Mathematics and Applied Mathematics | Biological Modelling | MATU7914 | WTW721 | Selection MSC |
| Mathematics and Applied Mathematics | Biological Modelling | MATU7924 | WTW721 | Selection MSC |
| Mathematics and Applied Mathematics | Fractional calculus | MATV6814 | WTW622 | Selection BSc |
| Mathematics and Applied Mathematics | Fractional calculus | MATV6824 | WTW622 | Selection BSc |
| Mathematics and Applied Mathematics | Fractional calculus | MATV7914 | WTW722 | Selection MSC |
| Mathematics and Applied Mathematics | Fractional calculus | MATV7924 | WTW722 | Selection MSC |
| Mathematics and Applied Mathematics | Financial Mathematics | MATW6814 | WTW623 | Selection BSc |
| Mathematics and Applied Mathematics | Financial Mathematics | MATW6824 | WTW623 | Selection BSc |
| Mathematics and Applied Mathematics | Financial Mathematics | MATW7914 | WTW723 | Selection MSC |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|---|----------------------|----------|--|
| Mathematics and Applied Mathematics | Financial Mathematics | MATW7924 | WTW723 | Selection MSC |
| Mathematics and Applied Mathematics | Graph theory | MATX6814 | WTW624 | MATM3734 AND AT LEAST 40% IN MATM3744 |
| Mathematics and Applied Mathematics | Graph theory | MATX6824 | WTW624 | MATM3734 AND AT LEAST 40% IN MATM3744 |
| Mathematics and Applied Mathematics | Graph theory | MATX7914 | WTW724 | MATM3734 AND AT LEAST 40% IN MATM3744 |
| Mathematics and Applied Mathematics | Graph theory | MATX7924 | WTW724 | MATM3734 AND AT LEAST 40% IN MATM3744 |
| Mathematics and Applied Mathematics | Asymptotic method | MATY6814 | WTW625 | Selection BSc |
| Mathematics and Applied Mathematics | Asymptotic method | MATY6824 | WTW625 | Selection BSc |
| Mathematics and Applied Mathematics | Perturbation method | MATY7914 | WTW725 | MATY6814 or MATY6824 |
| Mathematics and Applied Mathematics | Perturbation method | MATY7924 | WTW725 | MATY6814 or MATY6824 |
| Mathematics and Applied Mathematics | Capita Selecta | MATZ6814 | WTW644 | Selection BSc |
| Mathematics and Applied Mathematics | Capita Selecta | MATZ6824 | WTW644 | Selection BSc |
| Mathematics and Applied Mathematics | Capita Selecta | MATZ6834 | WTW645 | Selection BSc |
| Mathematics and Applied Mathematics | Capita Selecta | MATZ6844 | WTW645 | Selection BSc |
| Mathematics and Applied Mathematics | Capita Selecta | MATZ6854 | WTW646 | Selection BSc |
| Mathematics and Applied Mathematics | Capita Selecta | MATZ6864 | WTW646 | Selection BSc |
| Mathematics and Applied Mathematics | Capita Selecta | MATZ7914 | WTW744 | Selection MSC |
| Mathematics and Applied Mathematics | Capita Selecta | MATZ7924 | WTW744 | Selection MSC |
| Mathematics and Applied Mathematics | Capita Selecta | MATZ7934 | WTW745 | Selection MSC |
| Mathematics and Applied Mathematics | Capita Selecta | MATZ7944 | WTW745 | Selection MSC |
| Mathematics and Applied Mathematics | Capita Selecta | MATZ7954 | WTW746 | Selection MSC |
| Mathematics and Applied Mathematics | Capita Selecta | MATZ7964 | WTW746 | Selection MSC |
| Mathematics and Applied Mathematics | Mathematics Literacy in Humanities | MTDH1508 | MTA108 | NCS |
| Mathematics and Applied Mathematics | Mathematics Literacy in Law | MTDL1508 | MTT108 | NCS |
| Microbial, Biochemical and Food Biotechnology | Introduction to Biochemistry and Microbiology | BLGY1683 | BLGY1683 | BLGY1513/BLGY1503 |
| Microbial, Biochemical and Food Biotechnology | Biochemistry of biological compounds | BOCB2616 | | BLGY1683 and CHEM 1624 / min 60% and CHEM1644 |
| Microbial, Biochemical and Food Biotechnology | Bioinformatics and omics sciences | BOCB6824 | BOC654 | BSc Hon Selection (BSc degree with at least 64 credits in Biochemistry at 3rd year level. 65% average for all undergraduate Biochemistry modules.) |
| Microbial, Biochemical and Food Biotechnology | Biochemistry Thesis | BOCD9100 BOCT9100 | BOC900 | MSC Selection PhD or DSc, Permission from ADH |
| Microbial, Biochemical and Food Biotechnology | Enzymology and introductory metabolism | BOCE2626 | BOC226 | BOCB2616 |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|---|----------|----------|--|
| Microbial, Biochemical and Food Biotechnology | Advanced enzyme kinetics and metabolism | BOCE3714 | BOC334 | BOCE2626 |
| Microbial, Biochemical and Food Biotechnology | Enzymology and catalysis | BOCE6814 | BOC634 | BSc Hon Selection (BSc degree with at least 64 credits in Biochemistry at 3rd year level. 65% average for all undergraduate Biochemistry modules.) |
| Microbial, Biochemical and Food Biotechnology | Biochemistry for agriculture and health sciences | BOCH2614 | BCC214 | None |
| Microbial, Biochemical and Food Biotechnology | Research: Literature study | BOCL6826 | BOC693 | BSc Hon Selection (BSc degree with at least 64 credits in Biochemistry at 3rd year level. 65% average for all undergraduate Biochemistry modules.) |
| Microbial, Biochemical and Food Biotechnology | Molecular biology | BOCM3714 | BOC314 | BOCE2626 |
| Microbial, Biochemical and Food Biotechnology | Advanced molecular biology | BOCM6814 | BOC674 | BSc Hon Selection (BSc degree with at least 64 credits in Biochemistry at 3rd year level. 65% average for all undergraduate Biochemistry modules.) |
| Microbial, Biochemical and Food Biotechnology | Biochemistry Dissertation | BOCM8900 | BOC700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Microbial, Biochemical and Food Biotechnology | Oral examination of theory and practical | BOCO6822 | BOC622 | BSc Hon Selection (BSc degree with at least 64 credits in Biochemistry at 3rd year level. 65% average for all undergraduate Biochemistry modules.) |
| Microbial, Biochemical and Food Biotechnology | Protein and proteome analysis | BOCP3724 | BOC324 | BOCE2626 |
| Microbial, Biochemical and Food Biotechnology | Research essay | BOCR6828 | BOC692 | BSc Hon Selection (BSc degree with at least 64 credits in Biochemistry at 3rd year level. 65% average for all undergraduate Biochemistry modules.) |
| Microbial, Biochemical and Food Biotechnology | Cell membranes, signal transduction and immunology | BOCS3724 | BOC344 | BOCE2626 |
| Microbial, Biochemical and Food Biotechnology | Structural biology | BOCS6824 | BOC624 | BOCE6814 |
| Microbial, Biochemical and Food Biotechnology | General analytical and chromatographic techniques in Biochemistry | BOCT6814 | BOC614 | BSc Hon Selection (BSc degree with at least 64 credits in Biochemistry at 3rd year level. 65% average for all undergraduate Biochemistry modules.) |
| Microbial, Biochemical and Food Biotechnology | Food products from animals | FSCA3714 | VWS314 | FSCS2624 |
| Microbial, Biochemical and Food Biotechnology | Food Microbiology | FSCB3724 | VWS344 | MKB216 |
| Microbial, Biochemical and Food Biotechnology | Food microbiology | FSCB6816 | VWS601 | BSc Hon Selection |
| Microbial, Biochemical and Food Biotechnology | Food Chemistry | FSCC2612 | VWS232 | CEM114 or [CHE112 + CHE142 + CHE151] and [CEM124/144] or [CHE132 + CHE122 + CHE161] |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|-------------------------------------|----------|----------|---|
| Microbial, Biochemical and Food Biotechnology | Chemical analysis of food | FSCC2622 | VWS222 | FSCC2612, and [CEM114 or CHE112 + CHE142 + CHE151] and [CEM124/144] or [CHE132 + CHE122 + CHE161] |
| Microbial, Biochemical and Food Biotechnology | Food chemistry | FSCC6816 | VWS602 | BSc Hon Selection |
| Microbial, Biochemical and Food Biotechnology | Dairy Science | FSCD4814 | VWS424 | FSCA3714 |
| Microbial, Biochemical and Food Biotechnology | Dairy Science | FSCD6826 | VWS603 | BSc Hon Selection |
| Microbial, Biochemical and Food Biotechnology | Food Engineering | FSCE3714 | VWS334 | FSCI2612, FSK134 |
| Microbial, Biochemical and Food Biotechnology | Foods: General | FSCF6826 | VWS605 | BSc Hon Selection |
| Microbial, Biochemical and Food Biotechnology | Selected topics in Food Science | FSCF6846 | VWS607 | BSc Hon Selection |
| Microbial, Biochemical and Food Biotechnology | Product development and sensory | FSCD4826 | VWS434 | FSCA3714, FSCE3714, FSCP3724, FSCB3724 |
| Microbial, Biochemical and Food Biotechnology | Introductory Food Science | FSCI2612 | VWS212 | FSCS2624 |
| Microbial, Biochemical and Food Biotechnology | Food Science Dissertation | FSCI8900 | VWS700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Microbial, Biochemical and Food Biotechnology | Food Science Thesis | FSCI9100 | VWS900 | MSc or MScAgric Selection PhD or DSc, Permission from ADH |
| Microbial, Biochemical and Food Biotechnology | Literature study | FSCL6803 | VWS695 | BSc Hon Selection |
| Microbial, Biochemical and Food Biotechnology | Meat Science | FSCM4814 | VWS444 | FSCP3714 |
| Microbial, Biochemical and Food Biotechnology | Meat Science | FSCM6826 | VWS604 | BSc Hon Selection |
| Microbial, Biochemical and Food Biotechnology | Food products from plants | FSCP3724 | VWS324 | FSCS2624 |
| Microbial, Biochemical and Food Biotechnology | Food products from plants; advanced | FSCP4814 | VWS414 | FSCA3714 |
| Microbial, Biochemical and Food Biotechnology | Fruit, vegetables and seeds | FSCP6826 | VWS606 | None |
| Microbial, Biochemical and Food Biotechnology | Literature study | FSCR4803 | VWS695 | FSCA3714, FSCE3714, FSCP3724, FSCB3724 |
| Microbial, Biochemical and Food Biotechnology | Research Project | FSCR4805 | VWS693 | FSCA3714, FSCE3714, FSCP3724, FSCB3724 |
| Microbial, Biochemical and Food Biotechnology | Food Systems | FSCS2624 | VWS224 | FSCI2612, FSCC2612 |
| Microbial, Biochemical and Food Biotechnology | Food Science Research Project | FSPR6808 | VWS693 | BSc Hon Selection |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|--|----------|-------------------|--|
| Microbial, Biochemical and Food Biotechnology | Industrial quality management | IQMQ2622 | IQM242 | None |
| Microbial, Biochemical and Food Biotechnology | Microbial Biotechnology Dissertation | MBBT8900 | BTG700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Microbial, Biochemical and Food Biotechnology | Microbial Biotechnology Thesis | MBBT9100 | BTG900 | MSc Selection PhD or DSc, Permission from ADH |
| Microbial, Biochemical and Food Biotechnology | Commercial microbial products and biotechnology | MCBB3724 | MKB364 | MCBG3714 |
| Microbial, Biochemical and Food Biotechnology | Continuous and batch cultivation of microorganisms | MCBC6814 | MKB694/ BTG634 | BScHon Selection (At least 64 credits in Microbiology at third year level. An average of 65% in undergraduate Microbiology) modules. These include FSCB3724 and BOCM3721 |
| Microbial, Biochemical and Food Biotechnology | Microbial diversity | MCBD6824 | MKB634 | BScHon Selection (At least 64 credits in Microbiology at third year level. An average of 65% in undergraduate Microbiology) modules. These include FSCB3724 and BOCM3716 |
| Microbial, Biochemical and Food Biotechnology | Microbial evolution and diversity | MCBE2626 | MKB226 | MCBP2616 |
| Microbial, Biochemical and Food Biotechnology | Growth, nutrition and death of microorganisms | MCBG3714 | MKB314 | MCBP2616 |
| Microbial, Biochemical and Food Biotechnology | Introduction to Microbiology for health sciences | MCBH2614 | MCB214 | None |
| Microbial, Biochemical and Food Biotechnology | Pathogenic microorganisms | MCBH2624 | MCB224 | MCBH2614 |
| Microbial, Biochemical and Food Biotechnology | Research Literature Study | MCBL6826 | MKB693 | BScHon Selection (At least 64 credits in Microbiology at third year level. An average of 65% in undergraduate Microbiology) modules. These include VWS344 and BOC314. |
| Microbial, Biochemical and Food Biotechnology | Research: Literature Study | MCBL6826 | MKB693 | BScHon Selection (At least 64 credits in Microbiology at third year level. An average of 65% in undergraduate Microbiology) modules. These include FSCB3724 and BOCM3720 |
| Microbial, Biochemical and Food Biotechnology | Metabolic diversity | MCBM3724 | MKB324 | MCBP2616, BOCE2626 |
| Microbial, Biochemical and Food Biotechnology | Advanced molecular biology | MCBM6814 | MKB674 | BScHon Selection (At least 64 credits in Microbiology at third year level. An average of 65% in undergraduate Microbiology) modules. These include FSCB3724 (VWS344) and BOCM3718 (BOC314) |
| Microbial, Biochemical and Food Biotechnology | Oral examination in theory and practicals | MCBO6822 | MKB622 | BScHon Selection (At least 64 credits in Microbiology at third year level. An average of 65% in undergraduate Microbiology) modules. These include FSCB3724 and BOCM3715 |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---|--|----------|----------|---|
| Microbial, Biochemical and Food Biotechnology | The basic principles of Microbiology | MCBP2616 | MKB216 | BLGY1513 & BLGY1683 |
| Microbial, Biochemical and Food Biotechnology | The basic principles of Microbiology | MCBP2616 | MKB216 | BLGY1513 & BLGY1683 |
| Microbial, Biochemical and Food Biotechnology | Microbial evolution and diversity | MCBE2626 | MKB226 | MCBP2616 |
| Microbial, Biochemical and Food Biotechnology | Pathogens and immunity | MCBP3724 | MKB344 | MCBP2616 |
| Microbial, Biochemical and Food Biotechnology | Applied microbial physiology | MCBP6814 | MKB654 | BScHon Selection (At least 64 credits in Microbiology at third year level. An average of 65% in undergraduate Microbiology) modules. These include FSCB3724 (VWS344) and BOCM3717 (BOC314) |
| Microbial, Biochemical and Food Biotechnology | Research project | MCBR6828 | MKB692 | BScHon Selection (At least 64 credits in Microbiology at third year level. An average of 65% in undergraduate Microbiology) modules. These include VWS344 and BOC314. |
| Microbial, Biochemical and Food Biotechnology | Research essay (second to fourth quarter) | MCBR6828 | MKB692 | BScHon Selection (At least 64 credits in Microbiology at third year level. An average of 65% in undergraduate Microbiology) modules. These include FSCB3724 and BOCM3719 |
| Microbial, Biochemical and Food Biotechnology | Techniques in Microbiology | MCBT6814 | MKB614 | BScHon Selection (At least 64 credits in Microbiology at third year level. An average of 65% in undergraduate Microbiology) modules. These include FSCB3724 (VWS344) and BOCM3714 (BOC314). |
| Microbial, Biochemical and Food Biotechnology | Microbiology Dissertation | MCBT8900 | MKB700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Microbial, Biochemical and Food Biotechnology | Microbiology Thesis | MCBT9100 | MKB900 | MSc Selection PhD or DSc, Permission from ADH |
| Microbial, Biochemical and Food Biotechnology | Oral examination in theory and practicals | MCBO6822 | MKB622 | BScHon Selection (At least 64 credits in Microbiology at third year level. An average of 65% in undergraduate Microbiology) modules. These include VWS344 and BOC314. |
| Microbial, Biochemical and Food Biotechnology | | | MKB334 | |
| Office of the Dean | Introduction to Biology | BLGY1513 | BLG114 | NCS Life Sciences level 5 |
| Office of the Dean | Natural Science Education Community Service Learning | CLNS3702 | NEC302 | |
| Office of the Dean | Introduction to Mathematics | MATD1400 | WTV100 | NCS at least Mathematical Literacy level 3 |
| Office of the Dean | Introduction to University Mathematics 1 | MATD1564 | | National Senior Certificate (NCS) Mathematics on performance level 4 (50%) |
| Office of the Dean | Introduction to University Mathematics 1 | MATD1564 | | National Senior Certificate (NCS) Mathematics on performance level 4 (50%) |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|--------------------|---|----------|----------|--|
| Office of the Dean | Academic Literacy, Language and Communication | QALC1513 | QALC1510 | |
| Office of the Dean | Engineering Drawings | QEDR1524 | | |
| Office of the Dean | Engineering Forum | QEFO1520 | | |
| Office of the Dean | Electrotechnique | QELT2722 | | PHYS1514, PHYS1624, Pre-Cond.: PHYS2624 (Min. 40%), Pre-Cond.: PHYS2632 (Min. 40%) |
| Office of the Dean | Environmental Engineering Design Project | QENV3724 | | Pass ALL 2nd year modules |
| Office of the Dean | Flow Mechanics | QFLO3724 | | PHYS2614, PHYS2624, Pre-Cond.: MATA2614 (Min. 40%) |
| Office of the Dean | Machine Design | QMAD2612 | | Pre-cond.: PHYS1614 (Min. 40%), MATM1614 (Min. 40%), MATM1624 (Min. 40%) |
| Office of the Dean | Engineering Materials | QMAT2613 | | |
| Office of the Dean | Material Science | QMSC2613 | | |
| Office of the Dean | Electrical Power Systems | QPOW3724 | | QELT2722 |
| Office of the Dean | Signal Theory | QSIG3714 | | PHYS2624, PHYS2642, QELT2722 |
| Office of the Dean | Strength of Materials 1 | QSTR2624 | | MATM1614, MATA1614, Pre-Cond.: MATM2614 (Min. 40%) |
| Office of the Dean | Strength of Materials 2 | QSTR3714 | | Pre-Cond.: QSTR2624 (Min. 40%) |
| Office of the Dean | Strength of Materials 3 | QSTR3724 | | QSTR2624 |
| Office of the Dean | Engineering Survey | QSUR3614 | | MATM1614, MATM1624 |
| Office of the Dean | Engineering Thermodynamics | QTHE3724 | | PHYS2614 |
| Office of the Dean | Practical Experience (8 weeks) | QVAC2520 | | Pre-Cond.: QALC1513 (Min. 40%) |
| Office of the Dean | Workshop Practice | QWOR2520 | | |
| Office of the Dean | Skills and Competencies for Natural Sciences | SCNS1508 | VBN108 | |
| Physics | The structure and evolution of stars | PHYA2613 | AST251 | PHYA1554 and PHYA1664 and WTW114 and WTW124 |
| Physics | The structure and evolution of galaxies | PHYA2623 | AST252 | PHYA1554 and PHYA1664 and WTW114 and WTW124 |
| Physics | Astronomy Practical | PHYA3708 | none | PHYA2613 and PHYA2623 |
| Physics | Radiative Processes I | PHYA3772 | FSK372 | FSK214 and FSK242 |
| Physics | Radiative Processes II | PHYA3782 | FSK382 | FSK314 and FSK332 and FSK372 |
| Physics | NASSP Hons theory | PHYA6800 | FSK625 | Selection BScHon (NASSP) |
| Physics | Astrophysics Research Essay | PHYA6808 | FSK692 | Selection BScHon |
| Physics | Astrophysics | PHYA6814 | FSK612 | Selection BScHon |
| Physics | Astrophysics | PHYA6824 | FSK612 | Selection BScHon |
| Physics | General Relativity and Cosmology | PHYA6834 | FSK614 | Selection BScHon |
| Physics | General Relativity and Cosmology | PHYA6844 | FSK614 | Selection BScHon |
| Physics | Astrophysical Fluid Dynamics | PHYA6854 | FSK613 | Selection BScHon |
| Physics | Astrophysical Fluid Dynamics | PHYA6864 | FSK613 | Selection BScHon |
| Physics | High Energy Astrophysics | PHYA6874 | none | Selection BScHon |
| Physics | High Energy Astrophysics | PHYA6884 | none | Selection BScHon |
| Physics | NASSP MSc Theory | PHYA7900 | FSK725 | Selection MSc (NASSP) |
| Physics | NASSP MSc Dissertation | PHYA7990 | FSK791 | Selection MSc (NASSP) |
| Physics | Astrophysics Dissertation | PHYA8900 | FSK700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Physics | Astrophysics Thesis | PHYA9100 | FSK900 | MSc Selection PhD or DSc, Permission from ADH |
| Physics | Capita selecta I | PHYC6814 | FSK613 | Selection BScHon |
| Physics | Capita selecta III | PHYC6824 | FSK613 | Selection BScHon |
| Physics | Capita selecta II | PHYC6834 | FSK614 | Selection BScHon |
| Physics | Capita selecta IV | PHYC6844 | FSK614 | Selection BScHon |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|--------------------|---|----------|------------------------|---|
| Physics | Electrodynamics | PHYE6814 | FSK608 | Selection BScHon |
| Physics | Electrodynamics | PHYE6824 | FSK608 | Selection BScHon |
| Physics | Electronics | PHYE6834 | FSK611 | Selection BScHon |
| Physics | Electronics | PHYE6844 | FSK611 | Selection BScHon |
| Physics | Statistical Physics | PHYI6814 | FSK607 | Selection BScHon |
| Physics | Statistical Physics | PHYI6824 | FSK607 | Selection BScHon |
| Physics | Materials Science I | PHYI6834 | FSK609 | Selection BScHon |
| Physics | Materials Science I | PHYI6844 | FSK609 | Selection BScHon |
| Physics | Materials Science II | PHYI6854 | FSK610 | Selection BScHon |
| Physics | Materials Science II | PHYI6864 | FSK610 | Selection BScHon |
| Physics | Semiconductors | PHYI6874 | FSK606 | Selection BScHon |
| Physics | Semiconductors | PHYI6884 | FSK606 | Selection BScHon |
| Physics | Research Techniques | PHYR6814 | FSK603 | Selection BScHon |
| Physics | Research Techniques | PHYR6824 | FSK603 | Selection BScHon |
| Physics | Mechanics, Waves and Optics | PHYS2614 | FSK214 | (FSK114 or 60% FSK134) and (FSK124 or 60% FSK144) and (WTW114 or WTW134) and (WTW124 or WTW144) |
| Physics | Electronics | PHYS2624 | FSK224 | (FSK114 or 60% FSK134) and (FSK124 or 60% FSK144) and (WTW114 or WTW134) and (WTW124 or WTW144) |
| Physics | Practical Work: Physics | PHYS2632 | FSK232 | (With FSK214) |
| Physics | Electromagnetism | PHYS2642 | FSK242 | FSK214 |
| Physics | Ophthalmic Optics / Visual Optics | PHYS2654 | FSK254 | (FSK114 or FSK134) and (FSK124 or FSK144) |
| Physics | Special Ophthalmic Optics | PHYS2664 | FSK264 | FSK254 and (FSK114 or FSK134) and (FSK124 or FSK144) |
| Physics | Modern Physics | PHYS3714 | FSK314 | FSK214 |
| Physics | Solid-state Physics | PHYS3724 | FSK324 | FSK314 |
| Physics | Statistical Physics I | PHYS3732 | FSK332 | FSK214 |
| Physics | Statistical Physics II | PHYS3742 | FSK342 | FSK332 |
| Physics | Practical Work: Physics | PHYS3752 | FSK352 | FSK232 and (With FSK314 and FSK332) |
| Physics | Practical Work: Physics | PHYS3762 | FSK362 | FSK232 and (With FSK324 and FSK342) |
| Physics | Physics Research Essay | PHYS6808 | FSK692 | Selection BScHon |
| Physics | Quantum Mechanics | PHYS6814 | FSK601 | Selection BScHon |
| Physics | Quantum Mechanics | PHYS6824 | FSK601 | Selection BScHon |
| Physics | Solid State Physics I | PHYS6834 | FSK602 | Selection BScHon |
| Physics | Solid State Physics I | PHYS6844 | FSK602 | Selection BScHon |
| Physics | Mathematical Methods of Physics | PHYS6854 | FSK604 | Selection BScHon |
| Physics | Mathematical Methods of Physics | PHYS6864 | FSK604 | Selection BScHon |
| Physics | Solid State Physics II | PHYS6874 | FSK605 | Selection BScHon |
| Physics | Solid State Physics II | PHYS6884 | FSK605 | Selection BScHon |
| Physics | Physics Dissertation | PHYS8900 | FSK700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Physics | Physics Thesis | PHYS9100 | FSK900 | MSc Selection PhD or DSc, Permission from ADH |
| Plant Sciences | The interdependence of plants and life on earth | BLGY1643 | BLG144 | BLGY1513 |
| Plant Sciences | Field excursion 1 | BTNY2602 | PLK202 | BLGY 1513 and BLGY1643 |
| Plant Sciences | Plant adaptations for survival on land | BTNY2616 | PLK214 + PLK212/PLK216 | BLGY 1513 and BLGY1643 |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|--------------------|---|----------|-------------------------|--|
| Plant Sciences | Introductory plant development and biotechnology | BTNY2626 | PLK224 + PLK262/ PLK226 | BLGY 1513 and BLGY1643 |
| Plant Sciences | Field excursion 2 | BTNY3702 | PLK302 | Min. BTNY2616 |
| Plant Sciences | Diversity and systematics of higher plants | BTNY3714 | PLK314 | Min. BTNY2616 |
| Plant Sciences | Plant carbon metabolism and eco-physiology | BTNY3724 | PLK324 | None |
| Plant Sciences | Vegetation science and environmental management | BTNY3734 | PLK334 | Min. BTNY2616 |
| Plant Sciences | Plant defence and biotechnology | BTNY3744 | PLK344 | Min. BTNY2626 |
| Plant Sciences | Plant molecular biotechnology | BTNY3754 | PLK354 | Min. BTNY2616 |
| Plant Sciences | Literature review | BTNY6806 | PLK696 | BSc degree in Botany with at least 60% in Botany at third-year level |
| Plant Sciences | Research project | BTNY6808 | PLK698 | BSc degree in Botany with at least 60% in Botany at third-year level |
| Plant Sciences | Advanced plant ecology | BTNY6814 | PLK614 | BSc degree in Botany with at least 60% in Botany at third-year level |
| Plant Sciences | Plant metabolism and growth | BTNY6824 | PLK624 | BSc degree in Botany with at least 60% in Botany at third-year level |
| Plant Sciences | Plant molecular systematics | BTNY6834 | PLK634 | BSc degree in Botany with at least 60% in Botany at third-year level |
| Plant Sciences | Plant defence and applications | BTNY6844 | PLK644 | BSc degree in Botany with at least 60% in Botany at third-year level |
| Plant Sciences | Advanced plant taxonomy | BTNY6854 | PLK654 | BSc degree in Botany with at least 60% in Botany at third-year level |
| Plant Sciences | Ecosystem management and restoration | BTNY6864 | PLK664 | BSc degree in Botany with at least 60% in Botany at third-year level |
| Plant Sciences | Advanced plant molecular biotechnology | BTNY6874 | PLK674 | BSc degree in Botany with at least 60% in Botany at third-year level |
| Plant Sciences | Plant analytical biochemistry | BTNY6884 | PLK684 | BSc degree in Botany with at least 60% in Botany at third-year level |
| Plant Sciences | Botany Dissertation Dissertation | BTNY8900 | PLK700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Plant Sciences | Botany Thesis | BTNY9100 | PLK900 | MSc Selection PhD or DSc, Permission from ADH |
| Plant Sciences | Literature review | ENRH6806 | ORH696 | BSc degree in Environmental Rehabilitation with at least 60% in Botany at third-year level |
| Plant Sciences | Research project | ENRH6808 | ORH698 | BSc degree in Environmental Rehabilitation with at least 60% in Botany at third-year level |
| Plant Sciences | Environmental Rehabilitation Dissertation | ENRH8900 | ORH700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Plant Sciences | Environmental Rehabilitation Thesis | ENRH9100 | ORH900 | MSc Selection PhD or DSc, Permission from ADH |
| Plant Sciences | Plant Health Ecology Dissertation | PHEC8900 | PPG701 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Plant Sciences | Plant Health Ecology Thesis | PHEC9100 | PPG901 | MSc Selection PhD or DSc, Permission from ADH |
| Plant Sciences | Theoretical principles of plant breeding | PLTB2613 | PLT224 | None |
| Plant Sciences | Applied principles of plant breeding | PLTB2623 | PLT224 | None |
| Plant Sciences | Principles of quantitative genetics in plant breeding | PLTB3714 | PLT314 | None |
| Plant Sciences | Breeding for abiotic stress tolerance | PLTB3724 | PLT324 | None |
| Plant Sciences | Advanced plant breeding techniques | PLTB3744 | PLT214/ PLT344 | None |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|--------------------|--|----------|----------------|--|
| Plant Sciences | Literature review | PLTB4806 | PLT496/ PLT696 | None |
| Plant Sciences | Research project | PLTB4808 | PLT498/ PLT698 | None |
| Plant Sciences | Advanced quantitative genetics in plant breeding | PLTB4814 | PLT614/ PLT414 | None |
| Plant Sciences | Quality and stress tolerance breeding | PLTB4824 | PLT424 | None |
| Plant Sciences | Marker-assisted breeding | PLTB4834 | PLT434/ PLT634 | None |
| Plant Sciences | Statistics in plant sciences | PLTB4854 | PLT644/ PLT454 | None |
| Plant Sciences | Literature review | PLTB6806 | PLT696/ PLT496 | BSc or equivalent degree with the appropriate majors |
| Plant Sciences | Research project | PLTB6808 | PLT698/ PLT498 | BSc or equivalent degree with the appropriate majors |
| Plant Sciences | Advanced quantitative genetics in plant breeding | PLTB6814 | PLT414/ PLT614 | BSc or equivalent degree with the appropriate majors |
| Plant Sciences | Quality and stress tolerance breeding | PLTB6824 | PLT624 | BSc or equivalent degree with the appropriate majors |
| Plant Sciences | Marker-assisted breeding | PLTB6834 | PLT634/ PLT434 | BSc or equivalent degree with the appropriate majors |
| Plant Sciences | Statistics in plant sciences | PLTB6854 | PLT644/ PLT654 | BSc or equivalent degree with the appropriate majors |
| Plant Sciences | Advanced statistics in plant sciences | PLTB6874 | PLT644 | BSc or BSc Agric with the appropriate majors |
| Plant Sciences | Plant Breeding Dissertation | PLTB8900 | PLT700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Plant Sciences | Plant Breeding Thesis | PLTB9100 | PLT900 | MSc Selection PhD or DSc, Permission from ADH |
| Plant Sciences | Plant Breeding Interdisciplinary | PLTI8900 | | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Plant Sciences | Plant Breeding Thesis Interdisciplinary | PLTI9100 | PLT999 | MSc or MScAgric Selection PhD or DSc, Permission from ADH |
| Plant Sciences | Principles of Plant Pathology | PPLG2624 | PPG214/ PPG224 | Min. BLGY1513 and Min. one of BLGY1643 or BLGY1683 |
| Plant Sciences | Mycological plant pathology | PPLG3714 | PPG414/ PPG314 | Min. PPLG2624 |
| Plant Sciences | Plant disease management | PPLG3724 | PPG324 | Min. PPLG2624 |
| Plant Sciences | Bacterial and viral plant pathology | PPLG3734 | PPG424/ PPG334 | Min. PPLG2624 |
| Plant Sciences | Ecology of plant pathogens | PPLG3744 | PPG344 | Min. PPLG2624 |
| Plant Sciences | Literature review | PPLG4806 | PPG496 | None |
| Plant Sciences | Research project | PPLG4808 | PPG498 | None |
| Plant Sciences | Plant-pathogen interactions | PPLG4824 | PPG424/ PPG444 | None |
| Plant Sciences | Epidemiology and control of plant diseases | PPLG4834 | PPG434 | None |
| Plant Sciences | Molecular plant pathology | PPLG4844 | PPG334/ PPG444 | None |
| Plant Sciences | Literature review | PPLG6806 | PPG696 | None |
| Plant Sciences | Research project | PPLG6808 | PPG698 | None |
| Plant Sciences | Plant-pathogen interactions | PPLG6824 | PPG624/ PPG444 | None |
| Plant Sciences | Epidemiology and control of plant diseases | PPLG6834 | PPG634 | None |
| Plant Sciences | Molecular plant pathology | PPLG6844 | PPG334/ PPG644 | None |
| Plant Sciences | Plant Pathology Dissertation | PPLG8900 | PPG702 | BSc in relevant discipline, Selection MSc, Permission from ADH |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|--|--|----------|---------------|---|
| Plant Sciences | Plant Pathology Thesis | PPLG9100 | PPG902 | MSc Selection PhD or DSc, Permission from ADH |
| Quantity Surveying and Construction Management | Applied Building Science Ii | ABSD2604 | ABS204/ABS204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Applied Building Science Iii | ABSD3704 | ABS304/ABS304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Applied Building Science Ii | ABSR2604 | ABS204/ABS204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Applied Building Science Iii | ABSR3704 | ABS304/ABS304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Advanced Construction And Agricultural Engineering | AINC7901 | CIN793 | CINC7901 |
| Quantity Surveying and Construction Management | Advanced Property Development | ANDC7902 | END793 | Hons level qualification |
| Quantity Surveying and Construction Management | Advanced Project Management Iv | APMD6803 | GPB404/APM404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Advanced Project Management Iv | APMR6803 | GPB404/APM404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Architecture | ARGD2604 | ARG204/ARG204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Architecture | ARGR2604 | ARG204/ARG204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Building Science Ii | BCSD2604 | BOW204/BSC204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Building Economics | BOEC7902 | BOE704 | Hons level qualification |
| Quantity Surveying and Construction Management | Building Science Iii | BSCD3704 | BOW304/BSC304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Building Science Ii | BSCR2604 | BOW204/BSC204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Building Science Iii | BSCR3704 | BOW304/BSC304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Building Contracts Law | CCMD3704 | BKR304/CCM304 | NCS, AP=34 Math=L5 *1=L5 |
| Quantity Surveying and Construction Management | Building Contracts Law | CCMR3704 | BKR304/CCM304 | NCS, AP=34 Math=L5 *1=L5 |
| Quantity Surveying and Construction Management | Construction Contracts, Procedure And Procurement | CCPC7901 | CCP702 | Hons level qualification |
| Quantity Surveying and Construction Management | Construction Finance Iii | CFND3704 | CFN304/CFN304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Construction Finance Iv | CFND6804 | KOF404/CFN404 | BSc CM &/OR BSc QS |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|--|---|----------|---------------|---|
| Quantity Surveying and Construction Management | Construction Finance Iv | CFND6804 | KOF404/CFN404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Construction Finance Iii | CFNR3704 | CFN304/CFN304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Construction Finance Iv | CFNR6804 | KOF404/CFN404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Construction Finance Iv | CFNR6804 | KOF404/CFN404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Construction And Agricultural Engineering | CINC7901 | CIN702 | Hons level qualification |
| Quantity Surveying and Construction Management | Construction Economics I | COED1504 | BOE104/COE104 | NSC, AP=34 Math=L5 *1=L5 |
| Quantity Surveying and Construction Management | Construction Economics Ii | COED2604 | BOE204/COE204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Construction Economics Iii | COED3704 | BOE304/COE304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Building Economics Iv | COED6804 | BOE404/COE404 | BSc QS |
| Quantity Surveying and Construction Management | Construction Economics I | COER1504 | BOE104/COE104 | NSC, AP=34 Math=L5 *1=L5 |
| Quantity Surveying and Construction Management | Construction Economics Ii | COER2604 | BOE204/COE204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Construction Economics Iii | COER3704 | BOE304/COE304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Building Economics Iv | COER6804 | BOE404/COE404 | BSc QS |
| Quantity Surveying and Construction Management | Construction Science Ii | CSCD2604 | KWE204/CSC204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Construction Science Iii | CSCD3704 | KWE304/CSC304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Construction Science Ii | CSCD6803 | KWE404/CSC404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Construction Science Ii | CSCR2604 | KWE204/CSC204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Construction Science Iii | CSCR3704 | KWE304/CSC304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Construction Science Ii | CSCR6803 | KWE404/CSC404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Descriptive Construction Project | DCPD3704 | DCP304/DCP304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Descriptive Construction Project | DCPR3704 | DCP304/DCP304 | Pass 50% of 2st year prescribed modules |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|--|--------------------------------------|----------|--------------------|---|
| Quantity Surveying and Construction Management | Dispute Resolution | DPRP7902 | DPR702 | Hons level qualification |
| Quantity Surveying and Construction Management | Descriptive Quantification I | DQFD1504 | BKF104/ DQF 104 | NSC, AP=34 Math=L5 *1=L5 |
| Quantity Surveying and Construction Management | Descriptive Quantification Ii | DQFD2604 | BKF204/ DQF204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Descriptive Quantification Iii | DQFD3704 | BKF304/ DQF304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Descriptive Quantification Iii | DQFD3704 | BKF304/ DQF304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Descriptive Quantification Iv | DQFD6804 | BKF404/ DQF404 | BSc QS |
| Quantity Surveying and Construction Management | Descriptive Quantification I | DQFR1504 | BKF104/ DQF 104 | NSC, AP=34 Math=L5 *1=L5 |
| Quantity Surveying and Construction Management | Descriptive Quantification Ii | DQFR2604 | BKF204/ DQF204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Descriptive Quantification Iii | DQFR3704 | BKF304/ DQF304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Descriptive Quantification Iii | DQFR3704 | BKF304/ DQF304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Descriptive Quantification Iv | DQFR6804 | BKF404/ DQF404 | BSc QS |
| Quantity Surveying and Construction Management | Descriptive Quantification Project | DQSD3704 | BKS302/ DQS303 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Descriptive Quantification Project | DQSR3704 | BKS302/ DQS302 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Engineering Science | EGSD1504 | IGW104/ EGS104 | NSC, AP=34 Math=L5 *1=L5 |
| Quantity Surveying and Construction Management | Engineering Science | EGSR1504 | IGW104/ EGS104 | NSC, AP=34 Math=L5 *1=L5 |
| Quantity Surveying and Construction Management | Property Development | ENDC7902 | END704 | Hons level qualification |
| Quantity Surveying and Construction Management | Research Essay: Property Development | ENDR7900 | END792 | INDR7902 |
| Quantity Surveying and Construction Management | Property Valuation And Management | ENWV7904 | ENW793 | Hons level qualification |
| Quantity Surveying and Construction Management | Introduction To Research | INDR7902 | | Hons level qualification |
| Quantity Surveying and Construction Management | Integrated Project Iv | INPD6803 | GIP404/ INP404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Integrated Project Iv | INPR6803 | GIP404/ INP404 | BSc CM &/OR BSc QS |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|--|--|----------|-------------------|---|
| Quantity Surveying and Construction Management | Integrated Project Management Pro | IPMP7904 | | Hons level qualification |
| Quantity Surveying and Construction Management | Construction Science Ii | KWEG2612 | | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Life Cycle Cost, Facilities Evaluation And Management | LSFP7902 | LSF793 | Hons level qualification |
| Quantity Surveying and Construction Management | Management Of Information And Communication Systems Iv | MCID6808 | BK1404/ MC1404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Management Of Information And Communication Systems Iv | MCIR6808 | BK1404/ MC1404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Property Development Economics I | PDED1504 | END104/ PDE104 | NSC, AP=34 Math=L5 *1=L5 |
| Quantity Surveying and Construction Management | Property Development Economics Ii | PDED2604 | END204/ PDE204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Property Development Economics Iii | PDED3704 | END304/ PDE304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Property Development Economics Iv | PDED6802 | END404/ PDE404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Property Development Economics I | PDER1504 | END104/ PDE104 | NSC, AP=34 Math=L5 *1=L5 |
| Quantity Surveying and Construction Management | Property Development Economics Ii | PDER2604 | END204/ PDE204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Property Development Economics Iii | PDER3704 | END304/ PDE304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Property Development Economics Iv | PDER6802 | END404/ PDE404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Property Facilities Management | PFMD6804 | EFB404/ PFM404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Property Facilities Management | PFMR6804 | EFB404/ PFM404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Professional Practice | PPRD6802 | BPK404/ PPR404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Professional Practice | PPRR6802 | BPK404/ PPR404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Professional Practice | PPYC7901 | PPY702 | Hons level qualification |
| Quantity Surveying and Construction Management | Production And Operational Management I | PQMD1504 | POB104/ PQM104 | NSC, AP=34 Math=L5 *1=L5 |
| Quantity Surveying and Construction Management | Production And Operational Management II | PQMD2604 | POB204/ PQM204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Production And Operational Management III | PQMD3704 | POB304/ PQM304 | Pass 50% of 2st year prescribed modules |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|--|---|------------------|----------------|--|
| Quantity Surveying and Construction Management | Production And Operational Management Iii | PQMD3704 | POB304/ PQM305 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Production And Operational Management Iii | PQMD6804 | POB404/ PQM404 | BSc CM |
| Quantity Surveying and Construction Management | Production And Operational Management I | PQMR1504 | POB104/ PQM104 | NSC, AP=34 Math=L5 *1=L5 |
| Quantity Surveying and Construction Management | Production And Operational Management Ii | PQMR2604 | POB204/ PQM204 | Pass 50% of 1st year prescribed modules |
| Quantity Surveying and Construction Management | Production And Operational Management Iii | PQMR3704 | POB304/ PQM304 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Production And Operational Management Iii | PQMR3704 | POB304/ PQM305 | Pass 50% of 2st year prescribed modules |
| Quantity Surveying and Construction Management | Production And Operational Management Iii | PQMR6804 | POB404/ PQM404 | BSc CM |
| Quantity Surveying and Construction Management | Construction Management Thesis | PQMR8900 | KOB700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Quantity Surveying and Construction Management | Construction Management Thesis | PQMR9100 | KOB900 | MSc Selection PhD or DSc, Permission from ADH |
| Quantity Surveying and Construction Management | Property Valuation Practice | PVPD6804 | EWP404/ PVP404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Property Valuation Practice | PVPR6804 | EWP404/ PVP404 | BSc CM &/OR BSc QS |
| Quantity Surveying and Construction Management | Quantity Surveying Thesis | QTSV8900 | BOR700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Quantity Surveying and Construction Management | Quantity Surveying Thesis | QTSV9100 | BOR900 | MSc Selection PhD or DSc, Permission from ADH |
| Quantity Surveying and Construction Management | Applied Project Management | TRBP7904 | TRB704 | Hons level qualification |
| Soil, Crop and Climate Sciences | Chemical principles in agriculture | AGRI1534 | LWL134 | NCS Mathematics level 3 AP>30, OR Mathematic Literacy level 7 AP>32 OR Bagric-ext or UPPAgric first yer succesfull completed |
| Soil, Crop and Climate Sciences | Chemical principles in agriculture: Practical | AGRI1551 | LWC151 | AGRI1512&AGRI1521 |
| Soil, Crop and Climate Sciences | Physical and mechanisel principles in agriculture | AGRI1554 | LWL154 | NCS Mathematics level 3 AP>30, OR Mathematic Literacy level 7 AP>32 OR Bagric-ext or UPPAgric first yer succesfull completed |
| Soil, Crop and Climate Sciences | Fundamentals of agrometeorology | CLIM2614 | LWR214 | SCCS1624 or FSK134 or FSK114 or AGRI1554 or concurrently |
| Soil, Crop and Climate Sciences | Agrometeorology for farming systems | CLIM2624 | LWR224 | SCCS1624 or Min (CLIM2614) |
| Soil, Crop and Climate Sciences | Climate data analysis for agrometeorological services | *008622 CLIM3714 | LWR314 | CLIM2614 or CLIM2624 |
| Soil, Crop and Climate Sciences | Climate change and variability | CLIM3724 | LWR324 | None |
| Soil, Crop and Climate Sciences | Simulating biophysical interactions | CLIM6824 | LWR424 | CLIM2614 |
| Soil, Crop and Climate Sciences | Physics and dynamics of the atmosphere | CLIM6834 | LWR434 | CLIM2614 |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|---------------------------------|---|----------|-----------------|--|
| Soil, Crop and Climate Sciences | Concepts in crop production | CROP2614 | AGR214 | SCCS124 |
| Soil, Crop and Climate Sciences | Winter grain, industrial and diverse crops | CROP2624 | AGR224 | CROP2614 or concurrently |
| Soil, Crop and Climate Sciences | Summer grain, oil and protein-rich crops | CROP3714 | AGR314 | CROP2614 or concurrently |
| Soil, Crop and Climate Sciences | Vegetable crops | CROP3724 | HRT324 | CROP2624 or concurrently |
| Soil, Crop and Climate Sciences | Research Project | IRRI6808 | BSB693 | BAGric / Selection |
| Soil, Crop and Climate Sciences | Evaluation of soil and water for irrigation suitability | IRRI6816 | BSB601 | BAGric / Selection |
| Soil, Crop and Climate Sciences | Evaluation of soil fertility and control | IRRI6826 | BSB602 | BAGric / Selection |
| Soil, Crop and Climate Sciences | Irrigation design | IRRI6846 | BSB603 | BAGric / Selection |
| Soil, Crop and Climate Sciences | Introduction to soil, crop and climate sciences | SCCS1624 | GKG124 | None |
| Soil, Crop and Climate Sciences | Soil classification, evaluation, and land use planning | SOIL2614 | GKD314 | SCCS1624 |
| Soil, Crop and Climate Sciences | Sustainable soil and water management | SOIL2624 | GKD324 | SCCS1624 |
| Soil, Crop and Climate Sciences | Soil fertility and fertilization | SOIL3714 | GKD314 | SCCS1624 |
| Soil, Crop and Climate Sciences | Soil contaminants and management | SOIL3724 | GKD324 | SCCS1624 |
| Soil, Crop and Climate Sciences | Land evaluation | SOIL7994 | GKD708 | None |
| Soil, Crop and Climate Sciences | Agrometeorology Dissertation | CLIM8900 | LWR700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Soil, Crop and Climate Sciences | Agrometeorology Thesis | CLIM9100 | LWR900 | MSc or MScAgric Selection PhD or DSc, Permission from ADH |
| Soil, Crop and Climate Sciences | Agronomy Dissertation | CROP8900 | AGR700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Soil, Crop and Climate Sciences | Agronomy Thesis | CROP9100 | AGR900 | MSc or MScAgric Selection PhD or DSc, Permission from ADH |
| Soil, Crop and Climate Sciences | Irrigation Management Dissertation | IRRI8900 | BSB700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Soil, Crop and Climate Sciences | Irrigation Management Thesis | IRRI9100 | BSB900 | MSc Selection PhD, Permission from ADH |
| Soil, Crop and Climate Sciences | Soil Science Dissertation | SOIL8900 | GKD700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Soil, Crop and Climate Sciences | Soil Science Thesis | SOIL9100 | GKD900 | MSc or MScAgric Selection PhD or DSc, Permission from ADH |
| Urban and Regional Planning | Research in Economics for Planners | URRE6814 | EVB614 | Applicable B degree |
| Urban and Regional Planning | Research in Economics for Planners | URRE6824 | EVB624 | Applicable B degree |
| Urban and Regional Planning | Basic Practice in Urban and Regional Planning | URBP6806 | GSP604 & GCP604 | Applicable B degree |
| Urban and Regional Planning | Dissertation Proposal in Urban and Regional Planning | URDP7912 | BNA712 | Applicable Honours degree |
| Urban and Regional Planning | Dissertation Proposal in Urban and Regional Planning | URDP7922 | BNA712 | Applicable Honours degree |
| Urban and Regional Planning | Research in Environmental Planning | UREP6814 | BGO614 | Applicable B degree |
| Urban and Regional Planning | Research in Environmental Planning | UREP6824 | BGO624 | Applicable B degree |
| Urban and Regional Planning | Futurology for Planners | URFP7912 | TVB752 | Applicable Honours degree |
| Urban and Regional Planning | Futurology for Planners | URFP7922 | TVB752 | Applicable Honours degree |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|----------------------------|--|----------|------------|--|
| Urban and Regionl Planning | Geographic Information Systems for Planners | URGI7904 | GIB704 | Applicable Honours degree |
| Urban and Regionl Planning | Housing for Planners | URHS7913 | BEH752 | Applicable Honours degree |
| Urban and Regionl Planning | Housing for Planners | URHS7923 | BEH752 | Applicable Honours degree |
| Urban and Regionl Planning | Human Settlements Dissertation | URHS8900 | HSS700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Urban and Regionl Planning | Human Settlements | URHS9100 | LHD900 | MSc Selection PhD or DSc, Permission from ADH |
| Urban and Regionl Planning | Integrated Development Planning | URID7912 | GOB752 | Applicable Honours degree |
| Urban and Regionl Planning | Integrated Development Planning | URID7922 | GOB752 | Applicable Honours degree |
| Urban and Regionl Planning | Land Use Management | URLM6814 | BGR752 | Applicable B degree |
| Urban and Regionl Planning | Land Use Management | URLM6824 | BGR752 | Applicable B degree |
| Urban and Regionl Planning | Planning Management | URLM7921 | BGR752 | Applicable Honours degree |
| Urban and Regionl Planning | Planning Management | URLM7922 | BGR752 | Applicable Honours degree |
| Urban and Regionl Planning | Land and Property Development Thesis | URLM9100 | SSS900 | MSc Selection PhD, Permission from ADH |
| Urban and Regionl Planning | Extended Research Essay | URMD7900 | SSS791 | Applicable Honours degree |
| Urban and Regionl Planning | Urban And Regional Planning Dissertation | URMD8900 | SSS700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Urban and Regionl Planning | Professional Practice in Urban and Regional Planning | URPP7914 | PPB752 | Applicable Honours degree |
| Urban and Regionl Planning | Professional Practice in Urban and Regional Planning | URPP7924 | PPB752 | Applicable Honours degree |
| Urban and Regionl Planning | Research in Theory of Planning | URPT6804 | BTR605/604 | Applicable B degree |
| Urban and Regionl Planning | Urban and Regional Planning Thesis | URPD9100 | SSS900 | MSc Selection PhD, Permission from ADH |
| Urban and Regionl Planning | Planning of Rural Areas | URRA7912 | LGB752 | Applicable Honours degree |
| Urban and Regionl Planning | Planning of Rural Areas | URRA7922 | LGB752 | Applicable Honours degree |
| Urban and Regionl Planning | Research Methodologies for Planners | URRM7914 | BMK793 | Applicable Honours degree |
| Urban and Regionl Planning | Research Methodologies for Planners | URRM7924 | BMK793 | Applicable Honours degree |
| Urban and Regionl Planning | Applied Regional Planning Project | URRP7906 | TSP793 | Applicable Honours degree |
| Urban and Regionl Planning | Research in Regional Planning Theory | URRT6805 | ATS691 | Applicable B degree |
| Urban and Regionl Planning | Research in Socio-Cultural Aspects in Planning | URSC6814 | ATB622 | Applicable B degree |
| Urban and Regionl Planning | Research in Socio-Cultural Aspects in Planning | URSC6824 | ATB622 | Applicable B degree |
| Urban and Regionl Planning | Planning for Tourism | URTD7912 | RBT752 | Applicable Honours degree |
| Urban and Regionl Planning | Planning for Tourism | URTD7922 | RBT752 | Applicable Honours degree |
| Urban and Regionl Planning | Transportation | URTP7912 | VVB752 | Applicable Honours degree |
| Urban and Regionl Planning | Transportation | URTP7913 | VVB752 | Applicable Honours degree |
| Urban and Regionl Planning | Urban Research Project | URUP7906 | SBF793 | Applicable Honours degree |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|----------------------------|---|-----------|----------|--|
| Urban and Regionl Planning | Research in Urban Development Theory | URUT6804 | UDT604 | Applicable B degree |
| Urban and Regionl Planning | Urban Geography | URUT7912 | GBE752 | Applicable Honours degree |
| Urban and Regionl Planning | Urban Geography | URUT7922 | GBE752 | Applicable Honours degree |
| Urban and Regionl Planning | Extended Research Essay | | SSS793 | Applicable Honours degree |
| Zoology and Entomology | Introduction to Morphology, Anatomy and Bio-ecology of insects, as well as Agriculturally Important Insect Pests and Control Measures (Agricultural Service Module) | ENTO2614 | ENT114 | Only BAgric + BSc Agric |
| Zoology and Entomology | Functional Morphology and Anatomy, Classification and Identification and Evolutionary Biology of Insects | ENTO2616 | ENT216 | BLGY 1613; BLGY 1663 Only BSc |
| Zoology and Entomology | Ecophysiology of Insects | ENTO2626 | ENT226 | BLGY1613; BLGY1663; ENT2616 |
| Zoology and Entomology | Advanced Insect Ecology | ENTO3714 | ENT314 | ENTO2616 + ENTO2626 |
| Zoology and Entomology | Applied Insect Pest Management | ENTO3724 | ENT324 | ENTO2626 + ENTO3714 |
| Zoology and Entomology | Advanced Medical, Veterinary and Forensic Entomology | ENTO3734 | ENT334 | ENTO 2616 + ENTO2626 |
| Zoology and Entomology | Applied Insect Biochemistry and Pharmacology | ENTO3744 | ENT344 | ENTO 2626 + ENTO3714 |
| Zoology and Entomology | Agricultural Entomology | ENTO3754 | ENT354 | ENTO 2616 + ENTO2626 |
| Zoology and Entomology | Research project | ENTO6808 | ENT692 | Selection BScHon |
| Zoology and Entomology | Quantitative Ecology | ENTO6822 | ENT622 | Selection BScHon |
| Zoology and Entomology | Biodiversity, Evolution & Biogeography | ENTO6832 | ENT632 | Selection BScHon |
| Zoology and Entomology | The Environment | ENTO6842 | ENT642 | Selection BScHon |
| Zoology and Entomology | Insect - Plant Interactions | ENTO6854 | ENT654 | Selection BScHon |
| Zoology and Entomology | Medical and Veterinary Entomology | ENTO6864 | ENT664 | Selection BScHon |
| Zoology and Entomology | Forensic Entomology | ENTO6874 | ENT674 | Selection BScHon |
| Zoology and Entomology | Pest Management | ENTO6884 | ENT684 | Selection BScHon |
| Zoology and Entomology | Capita Selecta in Entomology | ENTO6894 | ENT694 | Selection BScHon |
| Zoology and Entomology | Entomology Dissertation | ENTO8900 | ENT700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Zoology and Entomology | Entomology Thesis | ENTO9100 | ENT900 | MSc Selection PhD or DSc, Permission from ADH |
| Zoology and Entomology | Animals of medical and veterinary importance | ZLGY 2616 | DRK216 | BLGY 1613 & 1663 |
| Zoology and Entomology | Vertebrate Life and Evolution | ZLGY2626 | DRK226 | ZLGY2616 |
| Zoology and Entomology | Marine and Freshwater Ecology | ZLGY3714 | DRK314 | ZLGY2626 |
| Zoology and Entomology | Life strategies in Arid Environments | ZLGY3724 | DRK324 | ZLGY2626 |
| Zoology and Entomology | Conservation Ecology | ZLGY3734 | DRK334 | ZLGY2626 |

| NAME OF DEPARTMENT | MODULE DESCRIPTION | NEW CODE | OLD CODE | PREREQUISITE |
|------------------------|--|----------|----------|--|
| Zoology and Entomology | Animal behaviour | ZLGY3744 | DRK344 | ZLGY2626 |
| Zoology and Entomology | Research Project | ZLGY6808 | DRK692 | Selection BSc Hon |
| Zoology and Entomology | Research Techniques, Scientific Methodology and Scientific Communication | ZLGY6814 | DRK614 | Selection BSc Hon |
| Zoology and Entomology | Quantitative Ecology | ZLGY6822 | DRK622 | Selection BSc Hon |
| Zoology and Entomology | Biodiversity (Evolution & Biogeography) | ZLGY6832 | DRK632 | Selection BSc Hon |
| Zoology and Entomology | Wetland Ecology | ZLGY6834 | DRK634 | Selection BSc Hon |
| Zoology and Entomology | The Environment | ZLGY6842 | DRK642 | Selection BSc Hon |
| Zoology and Entomology | Veterinary Ectoparasitology | ZLGY6854 | DRK654 | Selection BSc Hon |
| Zoology and Entomology | Animal Behaviour / Veterinary Endoparasitology | ZLGY6864 | DRK664 | Selection BSc Hon |
| Zoology and Entomology | Aquatic Parasitology | ZLGY6874 | DRK674 | Selection BSc Hon |
| Zoology and Entomology | African Ornithology / Immunology | ZLGY6884 | DRK684 | Selection BSc Hon |
| Zoology and Entomology | Capita selecta in Zoology | ZLGY6894 | DRK694 | Selection BSc Hon |
| Zoology and Entomology | Zoology Dissertation | ZLGY8900 | DRK700 | BSc in relevant discipline, Selection MSc, Permission from ADH |
| Zoology and Entomology | Zoology Thesis | ZLGY9100 | DRK900 | MSc Selection PhD or DSc, Permission from ADH |
| Zoology en Entomology | Introduction to Zoology and Entomology | BLGY1663 | BLG144 | BLGY1513 |
| Zoology en Entomology | Research Techniques, Scientific Methodology and Scientific Communication | ENTO6814 | ENT614 | Selection BSc Hon |

EQUIVALENT CODES FROM SIX DIGITS TO EIGHT DIGITS

| OLD CODE | NEW CODE | OLD CODE | NEW CODE | OLD CODE | NEW CODE | OLD CODE | NEW CODE | OLD CODE | NEW CODE | OLD CODE | NEW CODE | OLD CODE | NEW CODE |
|----------------|-----------|---------------|----------|---------------|----------|---------------|-----------|---------------|----------|----------|----------|----------|----------|
| ABS204/ABS204 | ABSD2604 | BKS302/DQS302 | DQSR3704 | BSB601 | IRRI6816 | DIM602 | | END104/PDE104 | PDED1504 | FSK604 | PHYS6854 | GDF920 | FORC9100 |
| ABS204/ABS204 | ABSR2604 | BKS302/DQS303 | DQSD3704 | BSB602 | DQSD3704 | DIM603 | | END104/PDE104 | PDER1504 | FSK604 | PHYS6884 | GEN216 | GENE2616 |
| ABS304/ABS304 | ABSD3704 | BLG114 | BLGY1513 | BSB603 | IRRI6846 | DIM604 | | END204/PDE204 | PDED2604 | FSK605 | PHYS6874 | GEN246 | GENE2626 |
| ABS304/ABS304 | ABSR3704 | BLG124 | BLGY1623 | BSB693 | IRRI6808 | DIM605 | | END204/PDE204 | PDER2604 | FSK605 | PHYS6884 | GEN324 | GENE3724 |
| ACSF2716 | Various | BLG144 | BLGY1643 | BSB700 | IRRI8900 | DIM606 | | END304/PDE304 | PDED3704 | FSK606 | PHYI6874 | GEN334 | FORS3744 |
| ACSF2726 | Various | BLG144 | BLGY1663 | BSB900 | IRRI9100 | DIM607 | | END304/PDE304 | PDER3704 | FSK606 | PHYI6884 | GEN344 | GENE3744 |
| ADS 116 | SACP 1716 | BLGY1683 | | BTG700 | MBBT8900 | DIM608 | | END404/PDE404 | PDED6802 | FSK607 | PHYI6814 | GEN354 | GENE3734 |
| ADS 116 | SACP 1726 | BMK793 | URRM7914 | BTG900 | MBBT9100 | DIM701 | DIMH7910 | END404/PDE404 | PDER6802 | FSK607 | PHYI6824 | GEN614 | GENC6814 |
| ADS 126 | SARD 1716 | BMK793 | URRM7924 | BTR605/604 | URPT6804 | DIM702 | DIMP7900 | END704 | ENDC7902 | FSK608 | PHYE6814 | GEN614 | GENC6824 |
| ADS 126 | SARD 1726 | BNA712 | URDP7912 | CCP702 | CCPC7901 | DIM703 | DIMG7900 | END792 | ENDR7900 | FSK608 | PHYE6824 | GEN624 | GENM6814 |
| ADS 136 | SALP 1716 | BNA712 | URDP7922 | CEM112 | CHEM1512 | DIM704 | DIME7910 | END793 | ANDC7902 | FSK609 | PHYI6834 | GEN624 | GENM6824 |
| ADS 136 | SALP 1726 | BOC216 | BOCB2616 | CEM114 | CHEM1514 | DIM705 | DIMM7910 | ENT114 | ENTO2614 | FSK609 | PHYI6844 | GEN644 | GENS6814 |
| ADS 146 | SAAM 1716 | BOC226 | BOCE2626 | CEM124 | CHEM1624 | DIM706 | DIMI7910 | ENT216 | ENTO2616 | FSK610 | PHYI6854 | GEN644 | GENS6824 |
| ADS 146 | SAAM 1726 | BOC314 | BOCM3714 | CEM132 | CHEM1643 | DIM707 | DIMR7910 | ENT226 | ENTO2626 | FSK610 | PHYI6864 | GEN654 | GENP6814 |
| ADS 226 | SACT 1716 | BOC324 | BOCP3724 | CEM144 | CHEM1644 | DIM791 | DIMR7900 | ENT314 | ENTO3714 | FSK611 | PHYE6834 | GEN654 | GENP6824 |
| ADS 226 | SACT 1726 | BOC334 | BOCE3714 | CEM214 | CHEM2614 | DIM900 | DSMT9100 | ENT324 | ENTO3724 | FSK611 | PHYE6844 | GEN674 | GENE6834 |
| AGB605 | AGBS6824 | BOC344 | BOCS3724 | CEM224 | CHEM2624 | DMT214 | DATA2614 | ENT334 | ENTO3734 | FSK612 | PHYA6814 | GEN674 | GENE6844 |
| AGR214 | CROP2614 | BOC614 | BOCT6814 | CEM232 | CHEM2632 | DMT224 | DATA2624 | ENT344 | ENTO3744 | FSK612 | PHYA6824 | GEN686 | GENE6816 |
| AGR224 | CROP2624 | BOC622 | BOCO6822 | CEM242 | CHEM2642 | DMT322 | DATA3722 | ENT354 | ENTO3754 | FSK613 | PHYA6854 | GEN692 | GENE6808 |
| AGR314 | CROP3714 | BOC624 | BOCS6824 | CEM314 | CHEM3714 | DPR702 | DPRP7902 | ENT614 | ENTO6814 | FSK613 | PHYA6864 | GEN693 | GENE6814 |
| AGR700 | CROP8900 | BOC634 | BOCE6814 | CEM324 | CHEM3724 | DRK216 | ZLGY 2616 | ENT622 | ENTO6822 | FSK613 | PHYC6814 | GEN693 | GENE6824 |
| AGR900 | CROP9100 | BOC654 | BOCB6824 | CEM334 | CHEM3734 | DRK226 | ZLGY2626 | ENT632 | ENTO6832 | FSK613 | PHYC6824 | GEN700 | GENG8900 |
| ARG204/ARG204 | ARGD2604 | BOC674 | BOCM6814 | CEM344 | CHEM3744 | DRK314 | ZLGY3714 | ENT642 | ENTO6842 | FSK614 | PHYA6834 | GEN720 | FORC8900 |
| ARG204/ARG204 | ARGR2604 | BOC692 | BOCR6828 | CEM614 | CHEM6814 | DRK324 | ZLGY3724 | ENT654 | ENTO6854 | FSK614 | PHYA6844 | GEN727 | FORE8900 |
| ARG700 | ARCH8900 | BOC693 | BOCL6826 | CEM624 | CHEM6824 | DRK334 | ZLGY3734 | ENT664 | ENTO6864 | FSK614 | PHYC6834 | GEN731 | FORG8900 |
| ARG900 | ARCH9100 | BOC700 | BOCM8900 | CEM634 | CHEM6834 | DRK344 | ZLGY3744 | ENT674 | ENTO6874 | FSK614 | PHYC6844 | GEN799 | FORI8900 |
| AST251 | PHYA2613 | BOCD9100/ | BOCT9100 | CEM644 | CHEM6844 | DRK614 | ZLGY6814 | ENT684 | ENTO6884 | FSK625 | PHYA6800 | GEN799 | GENI8900 |
| AST252 | PHYA2623 | BOC900 | | CEM654 | CHEM6854 | DRK622 | ZLGY6822 | ENT692 | ENTO6808 | FSK692 | PHYA6808 | GEN900 | GENG9100 |
| ATB622 | URSC6814 | BOE104/COE104 | COED1504 | CEM664 | CHEM6864 | DRK632 | ZLGY6832 | ENT694 | ENTO6894 | FSK692 | PHYS6808 | GEN927 | FORE9100 |
| ATB622 | URSC6824 | BOE104/COE104 | COER1504 | CEM674 | CHEM6874 | DRK634 | ZLGY6834 | ENT700 | ENTO8900 | FSK700 | PHYA8900 | GEN931 | FORG9100 |
| ATS691 | URRT6805 | BOE204/COE204 | COED2604 | CEM684 | CHEM6884 | DRK642 | ZLGY6842 | ENT900 | ENTO9100 | FSK700 | PHYS8900 | GEO114 | GEOP1514 |
| BCC214 | BOCH2614 | BOE204/COE204 | COER2604 | CEM700 | CHEM8900 | DRK654 | ZLGY6854 | ENW793 | ENWV7904 | FSK725 | PHYA7900 | GEO124 | GEOH1624 |
| BEH752 | URHS7913 | BOE304/COE304 | COED3704 | CEM900 | CHEM9100 | DRK664 | ZLGY6864 | EV614 | URRE6814 | FSK791 | PHYA7990 | GEO214 | GEOH2614 |
| BEH752 | URHS7923 | BOE304/COE304 | COER3704 | CFN304/CFN304 | CFND3704 | DRK674 | ZLGY6874 | EV624 | URRE6824 | FSK900 | PHYA9100 | GEO224 | GEOP2624 |
| BES324 | CNCS2624 | BOE404/COE404 | COED6804 | CFN304/CFN304 | CFNR3704 | DRK684 | ZLGY6884 | EWP404/PVP404 | PVPD6804 | FSK900 | PHYS9100 | GEO234 | GEOP2614 |
| BES324 | CNCS2624 | BOE404/COE404 | COER6804 | CIN702 | CINC7901 | DRK692 | ZLGY6808 | EWP404/PVP404 | PVPR6804 | GBE752 | URUT7912 | GEO314 | GEOH3714 |
| BGO614 | UREP6814 | BOE704 | BOEC7902 | CIN793 | AINC7901 | DRK694 | ZLGY6894 | FSK214 | PHYS2614 | GBE752 | URUT7922 | GEO324 | GEOP3724 |
| BGO624 | UREP6824 | BOR700 | QTSV8900 | CISE2613 | CSIE2613 | DRK700 | ZLGY8900 | FSK224 | PHYS2624 | GCE700 | GECE8900 | GEO334 | GEOP3714 |
| BGR752 | URLM6814 | BOR900 | QTSV9100 | CISE2613 | CSIE2613 | DRK900 | ZLGY9100 | FSK232 | PHYS2632 | GCE900 | GECE9100 | GEO344 | GEOH3724 |
| BGR752 | URLM6824 | BOW106 | CONS1606 | CISE3614 | CSIE3614 | DTL224 | ANIB2624 | FSK242 | PHYS2642 | GDF214 | FORS2616 | GEO606 | GEOP6806 |
| BGR752 | URLM7921 | BOW204 | COQS2604 | CISE3614 | CSIE3614 | DTL314 | ANIB3714 | FSK254 | PHYS2654 | GDF224 | FORS2626 | GEO616 | GEOP6816 |
| BGR752 | URLM7922 | BOW204/BSC204 | BCSD2604 | CISE3724 | CSIE3724 | DTL324 | ANIB3724 | FSK264 | PHYS2664 | GDF314 | FORS3714 | GEO692 | GEOR6808 |
| BKF104/DQF 104 | DQFD1504 | BOW204/BSC204 | BSCR2604 | CISE3724 | CSIE3724 | DTL414 | ANIB4814 | FSK314 | PHYS3714 | GDF324 | FORS3724 | GEO700 | GEOR8900 |
| BKF104/DQF 104 | DQFR1504 | BOW206 | CONS2606 | CMS700 | CNCS8900 | DTL424 | ANIB4824 | FSK324 | PHYS3724 | GDF334 | FORS3734 | GEO700 | GEOR8900 |
| BKF204/DQF204 | DQFD2604 | BOW304 | COQS3704 | CMS900 | CNCS9100 | DTL601 | ANIB6814 | FSK332 | PHYS3732 | GDF614 | FORG6834 | GEO700 | GEOR8900 |
| BKF204/DQF204 | DQFR2604 | BOW304/BSC304 | BSCD3704 | DAF314 | ANIP3714 | DTL602 | ANIB6824 | FSK342 | PHYS3742 | GDF614 | FORG6844 | GEO900 | ENVR9100 |
| BKF304/DQF304 | DQFD3704 | BOW304/BSC304 | BSCR3704 | DAF324 | ANIP3724 | DTL603 | ANIB6826 | FSK352 | PHYS3752 | GDF624 | FORG6854 | GEO900 | GEOR9100 |
| BKF304/DQF304 | DQFD3704 | BOW306 | CONS3706 | DAF414 | ANIP4814 | DVL334 | ANIN3734 | FSK362 | PHYS3762 | GDF624 | FORG6864 | GEO900 | GEOR9100 |
| BKF304/DQF304 | DQFR3704 | BOW608 | CONS6808 | DAF424 | ANIP4824 | DVL344 | ANIN3744 | FSK372 | PHYS3772 | GDF674 | FORG6874 | GGF626 | ENVG6826 |
| BKF304/DQF304 | DQFR3704 | BOW708 | CONS7908 | DAF601 | ANIP6816 | DVL434 | ANIN4834 | FSK382 | PHYA3782 | GDF674 | FORG6884 | GGF636 | GEOP6816 |
| BKF404/DQF404 | DQFD6804 | BPK404/PPR404 | PPRD6802 | DAF602 | ANIP6824 | DVL464 | ANIN4864 | FSK601 | PHYS6814 | GDF686 | FORG6816 | GGF656 | GISR6826 |
| BKF404/DQF404 | DQFR6804 | BPK404/PPR404 | PPRR6802 | DAF602 | ANIP6824 | DVL601 | ANIN6815 | FSK601 | PHYS6824 | GDF692 | FORG6808 | GGH636 | GENH6816 |
| BK1404/MCI404 | MCID6808 | BRS111 | CSIL1511 | DAF603 | ANIP6814 | DVL602 | ANIN6825 | FSK602 | PHYS6834 | GDF693 | FORG6814 | GGH666 | ENVG6846 |
| BK1404/MCI404 | MCIR6808 | BRS111 | CSIL1511 | DCP304/DCP304 | DCPD3704 | DVL603 | ANIN6864 | FSK602 | PHYS6844 | GDF693 | FORG6824 | GGH614 | GENH6814 |
| BKR304/CCM304 | CCMD3704 | BRS121 | CSIL1521 | DCP304/DCP304 | DCPR3704 | EFB404/PFM404 | PFMD6804 | FSK603 | PHYR6814 | GDF700 | FORS8900 | GGH614 | GENH6824 |
| BKR304/CCM304 | CCMR3704 | BRS121 | CSIL1521 | DIM601 | | EFB404/PFM404 | PFMR6804 | FSK603 | PHYR6824 | GDF900 | FORS9100 | GGH614 | GENH6814 |

| OLD CODE | NEW CODE | OLD CODE | NEW CODE | OLD CODE | NEW CODE | OLD CODE | NEW CODE | OLD CODE | NEW CODE | OLD CODE | NEW CODE | OLD CODE | NEW CODE |
|---------------|----------|-----------------|----------|---------------|----------|----------|----------|---------------|-----------|------------------|----------|----------------|----------|
| GG5634 | GENB6824 | GLG711 | GLGA7923 | HDK692 | CNCS4809 | LEK414 | AGEC4814 | MKB344 | MCBP3724 | New | BCIS2624 | PLK354 | BTNY3754 |
| GG5700 | GENH8900 | GLG712 | GLGA7933 | HRT324 | CROP3724 | LEK421 | AGEC4821 | MKB364 | MCBB3724 | New | BCIS3714 | PLK614 | BTNY6814 |
| GG5900 | GENH9100 | GLG712 | GLGA7943 | HSS700 | URHS8900 | LEK424 | AGEC4824 | MKB614 | MCBT6814 | New | BCIS3714 | PLK624 | BTNY6824 |
| GHR611 | GEOH6815 | GLG713 | GLGA7953 | IGW104/EGS104 | EGSD1504 | LEK434 | AGEC4834 | MKB622 | MCBO6822 | New | FORC3814 | PLK634 | BTNY6834 |
| GHR612 | GEOH6835 | GLG713 | GLGA7963 | IGW104/EGS104 | EGSR1504 | LEK444 | AGEC4844 | MKB622 | MCNO6822 | New | FORC6824 | PLK644 | BTNY6844 |
| GHR613 | GEOH6855 | GLG714 | GLGA7973 | IQM242 | GLGA7973 | LEK601 | AGEC6814 | MKB634 | MCBD6824 | New | FOR19100 | PLK654 | BTNY6854 |
| GHR622 | GEOH6865 | GLG714 | GLGA7983 | ITR124 | CNCS1624 | LEK602 | AGEC6834 | MKB654 | MCBP6814 | New | FORS6808 | PLK664 | BTNY6864 |
| GHR628 | GEOH6845 | GLG715 | GLGB7913 | ITR124 | CNCS1624 | LEK603 | AGEC6854 | MKB674 | MCBM6814 | New | FORS6814 | PLK674 | BTNY6874 |
| GHR700 | GEHR8900 | GLG715 | GLGB7923 | ITR134 | CNCS1534 | LEK604 | AGEC6874 | MKB692 | MCBR6828 | New | FORS6816 | PLK684 | BTNY6884 |
| GHR900 | GEHR9100 | GLG721 | GLGC7913 | ITR134 | CNCS1534 | LEK605 | AGEC6894 | MKB692 | MCBR6828 | New | FORS6824 | PLK696 | BTNY6806 |
| GIB704 | URGI7904 | GLG721 | GLGC7923 | KLE134 | CNST1534 | LEK606 | AGEC6824 | MKB693 | MCBL6826 | New | FORS6834 | PLK698 | BTNY6808 |
| GIP404/INP404 | INPD6803 | GLG722 | GLGC7933 | KLE134 | CNST1534 | LEK607 | AGEC6844 | MKB693 | MCBL6826 | New | FORS6844 | PLK700 | BTNY8900 |
| GIP404/INP404 | INPR6803 | GLG722 | GLGC7943 | KLE144 | CNST1644 | LEK608 | AGEC6864 | MKB694/BTG634 | MCBC6814 | New | FORS6854 | PLK900 | BTNY9100 |
| GIS224 | GISC2624 | GLG723 | GLGC7953 | KLE144 | CNST1644 | LEK609 | AGEC6884 | MKB700 | MCBT8900 | New | FORS6864 | PLT214/PLT344 | PLTB3744 |
| GIS324 | GISC3724 | GLG723 | GLGC7963 | KLE214 | CNST2614 | LEK610 | AGEM6824 | MKB900 | MCBT9100 | New | FORS6874 | PLT224 | PLTB2613 |
| GIS616 | GISC6816 | GLG724 | GLGC7973 | KLE214 | CNST2614 | LEK611 | AGEM6844 | MOB707 | ENMT5810 | New | FORS6884 | PLT224 | PLTB2623 |
| GIS646 | GISC3704 | GLG724 | GLGC7983 | KLE334 | CNST3734 | LEK693 | AGEC6808 | MOB707 | ENMT7910 | New | GENI9100 | PLT314 | PLTB3714 |
| GKD314 | SOIL2614 | GLG725 | GLGD7913 | KLE334 | CNST3734 | LEK720 | AGEC7902 | MOB708 | ENMT5820 | New | GEH6826 | PLT324 | PLTB3724 |
| GKD314 | SOIL3714 | GLG725 | GLGD7923 | KLE344 | CNST3744 | LEK793 | AGEN7902 | MOB708 | ENMT5826 | NLB601 | WDMT6816 | PLT414/PLT614 | PLTB6814 |
| GKD324 | SOIL2624 | GLG726 | GLGD7933 | KLE344 | CNST3744 | LEK900 | AGEC9100 | MOB708 | ENMT7920 | NLB602 | WDMT6836 | PLT424 | PLTB4824 |
| GKD324 | SOIL3724 | GLG726 | GLGD7943 | KOB700 | PQMR8900 | LGB752 | URRA7912 | MOB741 | IWMT7910 | NLB603 | WDMT6826 | PLT434/PLT634 | PLTB4834 |
| GKD700 | SOIL8900 | GLG731 | GLGE7913 | KOB900 | PQMR9100 | LGB752 | URRA7922 | MOB743 | ENMT7930 | NLB692 | WDMT6808 | PLT496/PLT696 | PLTB4806 |
| GKD708 | SOIL7994 | GLG731 | GLGE7923 | KOF404/CFN404 | CFND6804 | LHD900 | URHS9100 | MOB745 | IWMT7950 | NLB700 | WDMT8900 | PLT498/PLT698 | PLTB4808 |
| GKD900 | SOIL9100 | GLG732 | GLGE7933 | KOF404/CFN404 | CFND6804 | LIM600 | LIMG6800 | MOB791 | ENMT7900 | NLB900 | WDMT9100 | PLT614/PLT414 | PLTB4814 |
| GKG124 | SCCS1624 | GLG732 | GLGE7943 | KOF404/CFN404 | CFNR6804 | LIM700 | LIMG8900 | MRM700 | MRTM8900 | NLB900 | WDMT9100 | PLT624 | PLTB6824 |
| GLG114 | GLGY1614 | GLG733 | GLGE7953 | KOF404/CFN404 | CFNR6804 | LIM900 | LIMG9100 | MRM900 | MRTM9100 | NLE601 | WILD6816 | PLT634/PLT434 | PLTB6834 |
| GLG124 | GLGY1624 | GLG733 | GLGE7963 | KWE204/CSC204 | CSCD2604 | LNG224 | AGEG2624 | MTA108 | MTDH1508 | NLE602 | WILD6826 | PLT644 | PLTB6874 |
| GLG202 | GLGY2602 | GLG734 | GLGE7973 | KWE204/CSC204 | CSCD2604 | LNG314 | AGEG3714 | MTT108 | MTDL1508 | NLE603 | WILD6878 | PLT644/PLT454 | PLTB4854 |
| GLG212 | GLGY2612 | GLG734 | GLGE7983 | KWE304/CSC304 | CSCD3704 | LNG324 | AGEG3724 | MVL 720 | SASA 7903 | NLE692 | WILD6808 | PLT644/PLT654 | PLTB6854 |
| GLG214 | GLGY2614 | GLG791 | GLGF7910 | KWE304/CSC304 | CSCD3704 | LNG414 | AGEG4814 | MVL 721 | SARM 7903 | NMA622 | RMET6822 | PLT696/PLT496 | PLTB6806 |
| GLG222 | GLGY2622 | GLG900 | GLGE9100 | KWE404/CSC404 | CSCD6803 | LNG424 | AGEG4824 | MVL 723 | SAUR 7916 | none | PHYA3708 | PLT698/PLT498 | PLTB6808 |
| GLG224 | GLGY2624 | GLG900 | GLGY9100 | KWE404/CSC404 | CSCD6803 | LSF793 | LSFP7902 | MVL 730 | SAEX 7916 | none | PHYA6874 | PLT700 | PLTB8900 |
| GLG232 | GLGY2632 | GLG900 | MRTH9100 | LBB314 | AGMA3714 | LWC151 | AGRI1551 | MVL 731 | SARD 7926 | none | PHYA6884 | PLT900 | PLTB9100 |
| GLG242 | GLGY2642 | GOB752 | URID7912 | LBB324 | AGMA3724 | LWL124 | AGRI1624 | MVL 732 | SATN 7916 | OGT106 / | HARC1604 | PLT999 | PLTI9100 |
| GLG244 | GLGY2644 | GOB752 | URID7922 | LBB334 | AGMA3734 | LWL134 | AGRI1534 | MVL 733 | SACT 7926 | OGT106(4) | HARC1604 | POB104/PQM104 | PQMD1504 |
| GLG252 | GLGY2652 | GPB404/APM404 | APMD6803 | LBB344 | AGMA3744 | LWL154 | AGRI1554 | MVL 740 | SAVA 7926 | OGT204 | HARC2604 | POB104/PQM104 | PQMR1504 |
| GLG314 | GLGY3714 | GPB404/APM404 | APMR6803 | LBB362 | AGMA3762 | LWL164 | AGRI1664 | MVL 741 | SAAM 7926 | OGT206(4) | HARC2604 | POB204/PQM204 | PQMD2604 |
| GLG324 | GLGY3724 | GRT104 | PTEC1522 | LBB601 | AGMA6824 | LWR214 | CLIM2614 | MVL 750 | SAFM 7926 | OGT304 | HARC3704 | POB204/PQM204 | PQMR2604 |
| GLG334 | GLGY3734 | GRT112 | TRIG1512 | LBB602 | AGMA6814 | LWR224 | CLIM2624 | MVL 752 | SASM 7926 | OGT606 | HURB6806 | POB304/PQM304 | PQMD3704 |
| GLG344 | GLGY3744 | GRT122 | PHOT1522 | LBB603 | AGMA6834 | LWR314 | CLIM3714 | MVL 761 | SACP 7916 | OMA612 | DMET6812 | POB304/PQM304 | PQMR3704 |
| GLG354 | GLGY3754 | GRT204 | CDRA2604 | LBB604 | AGMA6844 | LWR324 | CLIM3724 | MVL 770 | SALP 7916 | ONW100 | DESN1600 | POB304/PQM305 | PQMD3704 |
| GLG364 | GLGY3764 | GSP604 & GCP604 | URBP6806 | LBB605 | AGMA6854 | LWR424 | CLIM6824 | MVL724 | SAPM 7926 | ONW200 | DESN2600 | POB304/PQM305 | PQMR3704 |
| GLG374 | GLGY3774 | HDK602 | CNST4814 | LBB606 | AGMA6864 | LWR434 | CLIM6834 | MVL791 | SASC 7900 | ONW300 | DESN3700 | POB404/PQM404 | PQMD6804 |
| GLG384 | GLGY3784 | HDK602 | CNST4814 | LBB607 | AGMA6884 | LWR700 | CLIM8900 | MVL792 | SAMD 7900 | ONW600 | DESN6800 | POB404/PQM404 | PQMR6804 |
| GLG616 | GLGY6816 | HDK602 | CNST4824 | LBB609 | AGMA6874 | LWR900 | CLIM9100 | MVL793 | SAPA 7900 | ORH696 | ENRH6806 | PPB752 | URPP7914 |
| GLG623 | GLGY6823 | HDK602 | CNST4824 | MBG214 | AGMA6808 | MBG214 | HMBG2614 | NA | IWM5810 | ORH698 | ENRH6808 | PPB752 | URPP7924 |
| GLG626 | GLGY6826 | HDK603 | CNST4834 | MBG314 | AGMA8900 | MBG314 | HMBG3714 | NA | IWM5820 | ORH700 | ENRH8900 | PPG214/PPG224 | PPLG2624 |
| GLG636 | GLGY6836 | HDK603 | CNST4834 | MBG324 | AGMA9100 | MBG324 | HMBG3724 | NA | IWM5826 | ORH900 | ENRH9100 | PPG324 | PPLG3724 |
| GLG643 | GLGY6843 | HDK603 | CNST4844 | MBG334 | AGEC8900 | MBG334 | HMBG3734 | NA | WRMT8900 | PAK714 / | PARC7904 | PPG334/PPG444 | PPLG4844 |
| GLG646 | GLGY6846 | HDK603 | CNST4844 | MBG344 | AGEC1514 | MBG344 | HMBG3744 | NEC302 | CLNS3702 | PLK202 | BTNY2602 | PPG334/PPG644 | PPLG6844 |
| GLG653 | GLGY6853 | HDK604 | CNST4854 | MCB214 | AGEC1624 | MCB214 | MCBH2614 | New | CHEM1513 | PLK214 + PLK212/ | BTNY2616 | PPG344 | PPLG3744 |
| GLG656 | GLGY6856 | HDK604 | CNST4854 | MCB224 | AGEC1634 | MCB224 | MCBH2624 | New | CHEM1623 | PLK216 | | PPG414/PPG314 | PPLG3714 |
| GLG663 | GLGY6863 | HDK604 | CNST4864 | MEM700 | ENMT8900 | MEM700 | ENMT8900 | New | BCIS1513 | PLK224 + PLK262/ | BTNY2626 | PPG424/ PPG444 | PPLG4824 |
| GLG673 | GLGY6873 | HDK604 | CNST4864 | MEM900 | ENMT9100 | MEM900 | ENMT9100 | New | BCIS1513 | PLK226 | | PPG424/PPG334 | PPLG3734 |
| GLG683 | GLGY6883 | HDK606 | CNCS4814 | MKB216 | MCBP2616 | MKB216 | MCBP2616 | New | BCIS1623 | PLK302 | BTNY3702 | PPG434 | PPLG4834 |
| GLG696 | GLGY6896 | HDK606 | CNCS4814 | MKB226 | MCBE2626 | MKB226 | MCBE2626 | New | BCIS1623 | PLK314 | BTNY3714 | PPG496 | PPLG4806 |
| GLG700 | GLGE8900 | HDK606 | CNCS4824 | MKB314 | MCBG3714 | MKB314 | MCBG3714 | New | BCIS2614 | PLK324 | BTNY3724 | PPG498 | PPLG4808 |
| GLG700 | GLGY8900 | HDK606 | CNCS4824 | MKB324 | MCBM3724 | MKB324 | MCBM3724 | New | BCIS2614 | PLK334 | BTNY3734 | PPG624/PPG444 | PPLG6824 |
| GLG711 | GLGA7913 | HDK692 | CNCS4809 | MKB334 | | MKB334 | | New | BCIS2624 | PLK344 | BTNY3744 | PPG634 | PPLG6834 |

| OLD CODE | NEW CODE | OLD CODE | NEW CODE | OLD CODE | NEW CODE | OLD CODE | NEW CODE | OLD CODE | NEW CODE | OLD CODE | NEW CODE | OLD CODE | NEW CODE |
|------------------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|----------------|----------|----------|----------|
| PPG696 | PPLG6806 | RIS612 | CSIE6843 | SKR791 | DDIS7900 | TSK424 | CNST3754 | VWS602 | FSCC6816 | WTW604 | MATD6814 | WTW702 | MATB7924 |
| PPG698 | PPLG6808 | RIS613 | CSIE6853 | SSS700 | URMD8900 | TSP793 | URRP7906 | VWS603 | FSCD6826 | WTW604 | MATD6824 | WTW703 | MATC7914 |
| PPG701 | PHEC8900 | RIS613 | CSIE6863 | SSS791 | URMD7900 | TVB752 | URFP7912 | VWS604 | FSCM6826 | WTW605 | MATD6814 | WTW703 | MATC7924 |
| PPG702 | PPLG8900 | RIS614 | CSIE6873 | SSS793 | | TVB752 | URFP7922 | VWS605 | FSCF6826 | WTW605 | MATE6824 | WTW704 | MATD7914 |
| PPG901 | PHEC9100 | RIS614 | CSIE6883 | SSS900 | URLM9100 | UDT604 | URUT6804 | VWS606 | FSCP6826 | WTW606 | MATF6814 | WTW704 | MATD7924 |
| PPG902 | PPLG9100 | RIS615 | CSII6833 | SSS900 | URPD9100 | VBN108 | SCNS1508 | VWS607 | FSCF6846 | WTW606 | MATF6824 | WTW705 | MATE7914 |
| PPY702 | PPYC7901 | RIS615 | CSII6843 | STS611 | STSB6815 | VBW124 | CNCS1622 | VWS693 | FSCR6808 | WTW607 | MATG6814 | WTW705 | MATE7924 |
| QALC1510 | QALC1513 | RIS616 | CSIN6833 | STS612 | STSM6815 | VBW124 | CNCS1622 | VWS693 | FSPR6808 | WTW607 | MATG6824 | WTW706 | MATF7914 |
| RBT752 | URTD7912 | RIS616 | CSIN6843 | STS613 | STSP6815 | VBW312 | CNCS3722 | VWS695 | FSCL6803 | WTW608 | MATH6814 | WTW706 | MATF7924 |
| RBT752 | URTD7922 | RIS617 | CSIP6813 | STS614 | STSS6815 | VBW312 | CNCS3722 | VWS695 | FSCR4803 | WTW608 | MATH6824 | WTW707 | MATG7914 |
| RIN104, CISE1606 | CSIE1606 | RIS617 | CSIP6823 | STS615 | STSF6815 | VBW324 | CNCS3724 | VWS700 | FSCI8900 | WTW609 | MATI6814 | WTW707 | MATG7924 |
| RIN104, CISE1606 | CSIE1606 | RIS618 | CSII6853 | STS616 | STSA6815 | VBW324 | CNCS3724 | VWS900 | FSCI9100 | WTW609 | MATI6824 | WTW708 | MATH7914 |
| RIS114 | CSIS1614 | RIS618 | CSII6863 | STS618 | STSC6815 | VBW332 | CNCS3732 | VWW124 | ANIG1624 | WTW610 | MATJ6814 | WTW708 | MATH7924 |
| RIS114 | CSIS1614 | RIS619 | CSIP6833 | STS621 | STSF6825 | VBW332 | CNCS3732 | VWW403 | ANIG4803 | WTW610 | MATJ6824 | WTW709 | MATI7914 |
| RIS124 | CSIS1624 | RIS619 | CSIP6843 | STS622 | STSR6825 | VBW344 | CNCS3744 | VWW464 | ANIN3764 | WTW611 | MATK6814 | WTW709 | MATI7924 |
| RIS124 | CSIS1624 | RIS620 | CSIP6853 | STS623 | STSF6865 | VBW344 | CNCS3744 | WDK214 | GRAS2614 | WTW611 | MATK6824 | WTW710 | MATJ7914 |
| RIS134 | CSIS1534 | RIS620 | CSIP6863 | STS624 | STSM6825 | VBW601 | CNFD4808 | WDK314 | GRAS3714 | WTW612 | MATL6814 | WTW710 | MATJ7924 |
| RIS134 | CSIS1534 | RIS621 | CSIP6873 | STS625 | STSP6825 | VBW601 | CNFD4808 | WDK324 | GRAS3724 | WTW612 | MATL6824 | WTW711 | MATK7914 |
| | CSIS1564 | RIS621 | CSIP6883 | STS626 | STSE6815 | VDG408 | | WDK414 | GRAS4814 | WTW613 | MATM6814 | WTW711 | MATK7924 |
| RIS144 | CSIS1644 | RIS622 | CSID6833 | STS627 | STSM6845 | VDG408 | | WDK414 | GRAS6814 | WTW613 | MATM6824 | WTW712 | MATL7914 |
| RIS154, RIS153 | CSIS1553 | RIS622 | CSID6843 | STS628 | STSA6825 | VDS214 | CNFD2614 | WDK424 | GRAS4824 | WTW614 | MATN6814 | WTW712 | MATL7924 |
| RIS154, RIS153 | CSIS1553 | RIS623 | CSIC6833 | STS629 | STSX6815 | VDS214 | CNFD2614 | WDK424 | GRAS6824 | WTW614 | MATN6824 | WTW713 | MATM7914 |
| RIS164 | CSIS1664 | RIS623 | CSIC6843 | STS629 | STSX6825 | VDS224 | CNFD2624 | WDK434 | GRAS4834 | WTW615 | MATO6814 | WTW713 | MATM7924 |
| RIS164 | CSIS1664 | RIS624 | CSIM6833 | STS692 | STSR6808 | VDS224 | CNFD2624 | WDK434 | GRAS6834 | WTW615 | MATO6824 | WTW714 | MATN7914 |
| RIS182 | CSIS1682 | RIS624 | CSIM6843 | STS711 | STSB7910 | VDS322 | CNFD1532 | WDK444 | GRAS4844 | WTW616 | MATP6814 | WTW714 | MATN7924 |
| RIS182 | CSIS1682 | RIS625 | CSID6853 | STS713 | STSP7910 | VDS322 | CNFD1532 | WDK444 | GRAS6844 | WTW616 | MATP6824 | WTW715 | MATO7914 |
| RIS214 | CSIS2614 | RIS625 | CSID6863 | STS714 | STSS7910 | VDS344 | CNFD3744 | WDK603 | GRAS6805 | WTW617 | MATQ6814 | WTW715 | MATO7924 |
| RIS214 | CSIS2614 | RIS626 | CSIS6813 | STS715 | STSF7910 | VDS344 | CNFD3744 | WDK700 | GRAS8900 | WTW617 | MATQ6824 | WTW716 | MATP7914 |
| RIS224 | CSIS2624 | RIS626 | CSIS6823 | STS716 | STSA7910 | VHL900 | SADR9100 | WDK900 | GRAS9100 | WTW618 | MATR6814 | WTW716 | MATP7924 |
| RIS224 | CSIS2624 | RIS630 | CSIC6853 | STS718 | STSC7910 | VKD214 | ANIG2614 | WTW100 | MATD1400 | WTW618 | MATR6824 | WTW717 | MATQ7914 |
| RIS242 | CSIS2642 | RIS630 | CSIC6863 | STS721 | STSF7920 | VKD224 | ANIG2624 | WTW114 | MATM1614 | WTW619 | MATS6814 | WTW717 | MATQ7924 |
| RIS242 | CSIS2642 | RIS693 | CSIS6806 | STS722 | STSR7910 | VKD314 | ANIG3714 | WTW114 | MATR1614 | WTW619 | MATS6824 | WTW718 | MATR7914 |
| RIS264 | CSIS2664 | RIS693 | CSIS6808 | STS723 | STSF7940 | VKD324 | ANIG3724 | WTW124 | MATM1624 | WTW620 | MATT6814 | WTW718 | MATR7924 |
| RIS264 | CSIS2664 | RIS700 | CSIS8900 | STS724 | STSM7920 | VKD334 | ANIG3734 | WTW134 | MATM1534 | WTW620 | MATT6824 | WTW719 | MATS7914 |
| RIS294 | CSIS2634 | RIS700 | CSIS8900 | STS725 | STSP7920 | VKD344 | ANIG3744 | WTW134 | MATR1534 | WTW621 | MATU6814 | WTW719 | MATS7924 |
| RIS294 | CSIS2634 | RIS715 | CSIS7915 | STS726 | STSE7910 | VKD693 | ANIG4805 | WTW142 | MATM1542 | WTW621 | MATU6824 | WTW720 | MATT7914 |
| RIS314 | CSIS3714 | RIS715 | CSIS7915 | STS727 | STSM7940 | VKD700 | ANIB8900 | WTW144 | MATM1544 | WTW622 | MATV6814 | WTW720 | MATT7924 |
| RIS314 | CSIS3714 | RIS715 | CSIS7925 | STS729 | STSX7910 | VKD700 | ANIN8900 | WTW174 | MATM1574 | WTW622 | MATV6824 | WTW721 | MATU7914 |
| RIS324 | CSIS3724 | RIS715 | CSIS7925 | STS729 | STSX7920 | VKD700 | ANIS8900 | WTW184 | MATM1584 | WTW623 | MATW6814 | WTW721 | MATU7924 |
| RIS324 | CSIS3724 | RIS725 | CSIS7935 | STS791 | STSD7900 | VKD900 | ANIB9100 | WTW214 | MATM2614 | WTW623 | MATW6824 | WTW722 | MATV7914 |
| RIS334 | CSIS3734 | RIS725 | CSIS7935 | STS791 | STSR7900 | VKD900 | ANIN9100 | WTW234 | MATA2634 | WTW624 | MATX6814 | WTW722 | MATV7924 |
| RIS334 | CSIS3734 | RIS725 | CSIS7945 | STSM1614 | Various | VKD900 | ANIS9100 | WTW244 | MATA2644 | WTW624 | MATX6824 | WTW723 | MATW7914 |
| RIS344 | CSIS3744 | RIS725 | CSIS7945 | TAR22(0)4 | TARC2604 | VVB752 | URTP7912 | WTW254 | MATM2654 | WTW625 | MATY6814 | WTW723 | MATW7924 |
| RIS344 | CSIS3744 | RIS730 | CSIS7955 | TAR224 / | TARC2604 | VVB752 | URTP7913 | WTW264 | MATM2664 | WTW625 | MATY6824 | WTW724 | MATX7914 |
| RIS601 | CSIN6813 | RIS730 | CSIS7955 | TAR304 | TARC3704 | VWS212 | FSCI2612 | WTW314 | MATM3714 | WTW644 | MATZ6814 | WTW724 | MATX7924 |
| RIS601 | CSIN6823 | RIS730 | CSIS7965 | TAR604 | TARC6804 | VWS222 | FSCC2622 | WTW324 | MATM3724 | WTW644 | MATZ6824 | WTW725 | MATY7914 |
| RIS604 | CSII6813 | RIS730 | CSIS7965 | TAR70(1)4 | ATRE7904 | VWS224 | FSCS2624 | WTW334 | MATM3734 | WTW645 | MATZ6834 | WTW725 | MATY7924 |
| RIS604 | CSII6823 | RIS731 | CSIS7975 | TAR714 | ATRE7904 | VWS232 | FSCC2612 | WTW344 | MATM3744 | WTW645 | MATZ6844 | WTW744 | MATZ7914 |
| RIS606 | CSIM6813 | RIS731 | CSIS7975 | TGW114 | MATA1614 | VWS314 | FSCA3714 | WTW364 | MATA3764 | WTW646 | MATZ6854 | WTW744 | MATZ7924 |
| RIS606 | CSIM6823 | RIS731 | CSIS7985 | TGW124 | MATA1624 | VWS324 | FSCP3724 | WTW374 | MATA3774 | WTW646 | MATZ6864 | WTW745 | MATZ7934 |
| RIS608 | CSIC6813 | RIS731 | CSIS7985 | TGW214 | MATA2614 | VWS334 | FSCE4814 | WTW384 | MATA3784 | WTW692 | MATM6816 | WTW745 | MATZ7944 |
| RIS608 | CSIC6823 | RIS791 | CSIS7910 | TRB704 | TRBP7904 | VWS344 | FSCB3724 | WTW601 | MATA6814 | WTW692 | MATM6828 | WTW746 | MATZ7954 |
| RIS609 | CSIE6813 | RIS791 | CSIS7910 | TSK312 | CNST3712 | VWS414 | FSCP4814 | WTW601 | MATA6824 | WTW700/MTHA700 | MATA8900 | WTW746 | MATZ7964 |
| RIS609 | CSIE6823 | RIS791 | CSIS7920 | TSK312 | CNST3712 | VWS424 | FSCD4814 | WTW602 | MATB6814 | WTW700/MTHA700 | MATM8900 | WTW792 | MATM7910 |
| RIS610 | CSID6813 | RIS791 | CSIS7920 | TSK322 | CNST3722 | VWS434 | FSCD4826 | WTW602 | MATB6824 | WTW701 | MATM7914 | WTW792 | MATM7920 |
| RIS610 | CSID6823 | RIS900 | CSIS9100 | TSK322 | CNST3722 | VWS444 | FSCM4814 | WTW603 | MATC6814 | WTW701 | MATA7924 | WTW900 | MATA9100 |
| RIS612 | CSIE6833 | SBF793 | URUP7906 | TSK424 | CNST3754 | VWS601 | FSCB6816 | WTW603 | MATC6824 | WTW702 | MATB7914 | WTW900 | MATM9100 |

THE MODULE CONTENT WILL BE PUBLISHED SEPERATELY.



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