

BDatSci offered in Faculties of Economic and Management Sciences, Science, AgriSciences and Arts & Social Sciences

Change of focal areas after year 1 and year 2

Background

This annexure describes how students can change focal areas within BDatSci after year 1 and year 2 (while upholding the necessary pass prerequisites, co requisites and prerequisites of the compulsory and core modules within a specific focal area) without adding additional years of study or extra modules.

The opportunity to change focal area without adding additional study years or extra modules to the degree (if all the prescribed modules were passed in the original focal area) is limited up to the end of year 2. Given the research component and required foundational knowledge, focal area changes during the 3rd and 4th year, are not possible without extending the programme. In the case where students still wish to change focal area at the end of year 3, additional modules need to be completed resulting in a study period that will exceed 4 years. If students want to change in year 3 or year 4, the concessions outlined in tables 1 and 2 remain applicable.

First Year compulsory modules for all focal areas (96 credits):

Computer Science 113(16) or 114(16), 144(16)

Data Science 141(16)

Mathematics 114(16), 144(16)

Probability Theory & Statistics 114(16) or 144(16)

Table 1 gives a summary of the modules that are recognised in place of the first-year elective modules in the new focal area you want to change to, provided these elective modules have all been passed. The number of credits required per focal area of the first year must be adhered to. Only focal areas that lend itself to articulation are listed in table 1.

Table 1: First year focal area articulation: Modules that can contribute to the new focal area's credits after the first year

The focal area you want to change to (credits):	Electives as listed in yearbook for the focal area you want to change to:	Modules and credits of electives that will be recognised as replacement modules
Statistical Learning (120) Faculty of Economic and Management Sciences	Actuarial Science 112(8) Applied Mathematics 144(16) or Economics 114(12), 144(12)	At least 24 credits from: Biology 124 (16) Physics 114(16), 144(16) Mathematics 154(16)
Analytics and Optimisation (120) Faculty of Economic and Management Sciences	Actuarial Science 112(8) Applied Mathematics 144(16) or Economics 114(12), 144(12)	At least 24 credits from: Biology 124 (16) Physics 114(16), 144(16) Mathematics 154(16)
Computer Science (120) Faculty of Science	Actuarial Science 112(8) Mathematics 154(16)	At least 24 credits from: Biology 124 (16) Physics 114(16), 144(16) Applied Mathematics 144(16) Economics 114(12), 144(12)
Applied Mathematics (120/128) Faculty of Science	Actuarial Science 112(8) or Physics 114(16)	At least 8 credits from: Biology 124 (16) or Economics 114(12)
GeoInformatics(120/128) Faculty of Arts and Social Sciences	Applied Mathematics 144(16) Actuarial Science 112(8) or Physics 114(16) Mathematics 154(16)	At least 24 credits from: Biology 124 (16) Physics 144(16) Economics 114(12), 144(12)
Statistical Genetics(128) Faculty of AgriSciences	Applied Mathematics 144(16)	At least 16 credits from: Physics 114(16), 144(16) Economics 114(12), 144(12) Mathematics 154(16)

Note: Any modules not listed in the middle column, *electives as listed in the yearbook* of table 1, are also regarded as compulsory modules for the focal area together with the core modules (of 96 credits) of BDatSci.

Second Year compulsory modules for all focal areas (96 credits):

Computer Science 214(16), 244(16)

Data Science 241(16)

Mathematics 214(16)

Mathematical Statistics 214(16), 245(8), 246(8)

Table 2 gives a summary of the modules that are recognised in place of the second year elective modules in the new focal area you want to change to, provided all these elective modules have been passed. The number of credits required per focal area of the second year must be adhered to. Only focal areas that lend itself to articulation options are listed in table 2.

Table 2: Second year focal area articulation: Modules that can contribute to the new focal area's credits after the second year

The focal area you want to change to (credits):	Electives as listed in yearbook for the focal area you want to change to:	Modules and credits of electives that will be recognised as replacement modules
Statistical Learning (128) Faculty of Economic and Management Sciences	Operations Research 214(16) Mathematics 244(16)	At least 32 credits from: Economics 214(16), 244(16) Applied Mathematics 214(16), 244(16) Physics 214(16), 244(16) Geographical Information Technology 211(16), 241(16) Genetics 214(16), 244(16)
Computer Science (128) Faculty of Science	Operations Research 214(16) Mathematics 244(16)	At least 32 credits from: Economics 214(16), 244(16) Applied Mathematics 214(16), 244(16) Physics 214(16), 244(16) Geographical Information Technology 211(16), 241(16) Genetics 214(16), 244(16)

Notes:

- Changing focal areas after year 3 (or during years 3 and 4), will result in you have to register for additional compulsory and elective modules. This will add further years of study to your BDatSci programme. Concessions outlined in tables 1 and 2 remain in place when changing focal area after year 2.
- The concessions in tables 1 and 2 apply only if students passed all the modules listed in the yearbook for the original focal area.
- If a student fails any module(s) in year 1 and 2 and want to switch to new focal area, all the prescribed modules of the new focal area should be followed and the concessions do not apply any longer.
- A student who failed any of the second year modules of the original focal area and wants to switch to either Computer Science or Statistical Learning focal areas, must also register for Mathematics 244 together with modules that will be repeated.
- You must always adhere to the minimum number of required credits of the focal area over the four years before the BDatSci degree can be awarded in the relevant Faculty (see faculty yearbooks). The focal area will be indicated on your academic transcript.