Advice for Bachelor Applied Data Analytics (BADAN) and Bachelor of Applied Data Analytics (Honours) (HADAN) students 2019

In all cases the degree rules on Programs and Courses override any advice given here.

-Kerry Taylor, Convenor
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Where can I find the degree (program) requirements?
You can find the program requirements on ANU Program and Courses by selecting the “Study Tab”.

Bachelor of Applied Data Analytics (BADAN)
http://programsandcourses.anu.edu.au/program/BADAN

Bachelor of Applied Data Analytics (Honours) (HADAN)
http://programsandcourses.anu.edu.au/program/HADAN

Program rules are subject to change, so please ensure to select the correct “Academic Year” when viewing the program rules.

You are required to follow the program rules for the year that you first enrolled. If you wish follow newer (or older) rules you need to seek permission from the Program Convenor.

What are the tuition fees?
All domestic undergraduate students are Commonwealth-supported where your fees are subsidised by the Australian government. As a Commonwealth supported student you are required to pay:

- Student contribution amount.
- Services and amenities fee.

Indicative international student fees for BADAN and HADAN are published on Programs and Courses under the “Admissions & Fees” tab.
Fees are applied per course, not per program. You can view the individual course fees on the “Offerings and Fees” tab on each individual course page on Programs and Courses.
Please note that all fees are indicative and are subject to change.

Can I study a major, minor or specialisation in BADAN?
Majors, minors and specialisations are only available for students studying the single degree and they are not available in a Flexible Double Degree. Within the single degree program rules, students are required to take 48 units from completion of elective courses offered by ANU. These electives can be used to contribute towards a major, minor or specialisation of your choice from across the University.

If a course is included in both the BADAN core requirements and within your chosen major, minor or specialisation you are required to confirm that the course is able to be “double counted” towards both requirements. To do this you must seek written confirmation from the College offering the course that it is approved to be counted as both a BADAN core requirement AND as a major, minor or specialisation requirement. Courses are usually counted towards the BADAN core requirements. All CECS courses in majors, minors or specialisations are pre-approved to be counted toward both BADAN core requirements and major, minor or specialisation requirements.

“Double counting” a course towards both BADAN core requirements and major, minor or specialisation requirements does not reduce the overall units required to complete the program. If a course is approved to be “double counted” you are required to make-up 6 units with an additional elective course.

To search for all available major, minors and specialisations use the “Catalogue Search” on Program and Courses and select the “Majors, minors & specialisations” search option.

Can I study a double degree?
Yes, many BADAN students choose to enrol in a Flexible Double Degree. If you want to study BADAN with another program, try the ANU degree-builder on Programs and Courses.

BADAN paired with another 3 year degree (e.g. Bachelor of Design will take 4 years to complete. BADAN paired with a 4-year degree (e.g. Bachelor of Engineering [Honours]) will take 5 years to complete.

Please ensure that you read the program requirements listed on Program and Courses for the Flexible Double Degree in full. Some program pairings do not allow any ANU electives to be taken (therefore, not allowing you to complete a major, minor or specialisation). Whereas some program
pairings, such as Bachelor of Actuarial Studies/Bachelor of Applied Data Analytics, allow for certain courses to be “double counted” towards both program requirements. This means that there may be room for ANU electives. If you are currently studying a Flexible Double Degree and have a course counting towards both program requirements we may be able to approve the course to count towards the other degree requirements, therefore allowing for you to complete 6 units of ANU electives towards the BADAN requirements. Please speak to CECS Student Services if you need to seek any course approvals.

Where can I get course advice on the non-BADAN part of a double degree?
Please contact the relevant ANU College for any questions relating to the non-BADAN degree.

What first year programming course should I take?
Previous knowledge and skills in programming are not required for any of the first year programming courses. However, well-developed mathematical thinking will help you throughout the degree.

If you enjoy mathematics, have a record of good marks in maths and would like to invest in computer science expertise at an advanced level and maximise your options for subsequent computing courses, choose:
COMP1130 Programming as Problem Solving (Advanced), and
COMP1140 Structured Programming (Advanced)

If you would prefer to minimise the computer science aspects of your BADAN and just want to learn minimally what you need, choose:
COMP1730 Programming for Scientists, and
COMP1110 Structured Programming

If you enjoy computing and want to invest in your computer science skills to maximise your options for subsequent computing courses choose:
COMP1100 Programming as Problem Solving, and
COMP1110 Structured Programming

What first year maths courses should I take?
Maths is complicated with a range of options to suit your secondary school maths level and ongoing interest in maths.

If you are a Flexible Double Degree student:
You may be required to complete MATH or STAT as a part of your non-BADAN degree. You should take this into account when choosing your MATH or STAT courses. It is possible to choose a MATH or STAT course that counts towards both degree requirements, therefore allowing for you to complete an ANU elective (see questions “Can I study a double degree?”).

If you have studied substantial maths at school but want to get into statistics (this is the best option for BADAN students who have the secondary school prerequisites):
Then you should take MATH1113 Mathematical Foundations for Actuarial Studies and either STAT1003 Statistical Techniques or STAT1008 Quantitative Research Methods.

MATH1113 is a compressed but basic course for introductory level maths which frees up the opportunity to study the introductory statistics course to give a broader exposure to statistics and an excellent grounding for the future STAT courses.
Both STAT courses are very similar. STAT1003 has more of a science focus and STAT1008 has more of a business focus.

If you have studied less maths at school and need to build confidence in maths and statistics, but are not studying a flexible double degree (this is the best option for BADAN students who have weaker secondary school maths and have room in their study plan to use an ANU elective course for a MATH course):

If you do not meet the secondary school prerequisites for MATH1113 Mathematical Foundations for Actuarial Studies then you must take MATH1003 Algebra and Calculus Methods as an elective first (this is generally not possible for flexible double degree students who do not have ANU electives in their program requirements).

Then you should take MATH1113 and either STAT1003 Statistical Techniques or STAT1008 Quantitative Research Methods.

Both STAT courses are very similar. STAT1003 has more of a science focus and STAT1008 has more of a business focus.

This option gives the opportunity to study the introductory statistics course to give a broader exposure to statistics and an excellent grounding for the future STAT courses.

If you have studied less maths at school and are studying a Flexible Double Degree or wish to minimise first year maths:

Then you should take MATH1003 Algebra and Calculus Methods followed by MATH1113 Mathematical Foundations for Actuarial Studies. If you follow this option you will need to do a little self-study for basic statistical concepts when you get to later required STAT courses.

If you have studied substantial maths at school and are confident in your skills:

Then you can take the courses MATH1013 Mathematics and Applications 1 and MATH1014 Mathematics and Applications 2 to maximise your maths strength and options for subsequent MATH or COMP electives. Please note that you must meet the secondary school prerequisites and you must be able to do a little self-study for very basic statistical concepts when you get to later required STAT courses.

If you have studied less maths at school, want to build up strength in maths and are not a flexible double degree student:

If you do not meet the secondary school prerequisites for MATH1113 Mathematical Foundations for Actuarial Studies then you must take MATH1003 Algebra and Calculus Methods as an elective first (this is generally not possible for flexible double degree students who do not have ANU electives in their program requirements). Then you should take the courses MATH1013 Mathematics and Applications 1 and MATH1014 Mathematics and Applications 2 to maximise your maths strengths and options for subsequent MATH or COMP electives. If you follow this option you will need to do a little self-study for basic statistical concepts when you get to later required STAT courses.

If you have an excellent secondary maths record and enjoy maths:

Then you should take the advanced courses, MATH1115 Advanced Mathematics and Applications 1 and MATH1116 Advanced Mathematics and Applications 2 to enjoy the challenge and maximise your later options for MATH or COMP electives. Please note that you must meet the advanced secondary school prerequisite and you will need to do a little self-study for basic statistical concepts when you get to later required STAT courses. With
this level of strength in maths you will have no trouble skipping the most introductory statistics material.

**What electives are recommended?**
The BADAN program requirements (single degree only) allow students to take 48 units of elective courses offered by ANU. This means that you can choose any course that is available and offered by the ANU (subject to you meeting the course prerequisites).

If you are looking for ideas for courses that complement the BADAN, look at courses offered in the following areas:

- Biology
- Business Information Systems
- Computer Science
- Digital Humanities
- Mathematics
- Population Health
- Sociology
- Statistics

One idea to consider would be DESN1002 Visual Communication: Design and Production to learn visual communication concepts and techniques that can assist in communicating the results of data analytics.

**I want to take STAT2001 Introductory Mathematical Statistics but I don’t meet the prerequisites on Programs and Courses. What can I do?**
Please email the Research School that holds the course in which you wish to enrol in to obtain permission. STAT2001 is owned by the Research School of Finance, Actuarial Studies and Statistics so you will need to email enquiries.rsfas@anu.edu.au to request a permission code. Be sure to mention that you are a current BADAN student.

**What do I need to do in order to take the Bachelor of Applied Data Analytics (Honours) program?**
The “Admissions & Fees” tab on the Bachelor of Applied Data Analytics (Honours) Programs and Courses page lists the admission requirements.

Admission for the HADAN program is “a Bachelor of Applied Data Analytics from ANU, or equivalent from another institution, completed within the last two years and the satisfaction of any requirements specified in the relevant honours specialisation.”
Under the “Study” tab, there are a number of specialisations suitable for the Honours program. If you are interested in any of the Honours specialisations ensure to read what the program requirements are. Pay particular attention to determine any prerequisite courses as you will need to satisfy through the BADAN.

**Can I take the HADAN program without taking a BADAN 3-year program?**

As indicated above, the admission requirements for the HADAN program is “a Bachelor of Applied Data Analytics from ANU, or equivalent from another institution, completed within the last two years and the satisfaction of any requirements specified in the relevant honours specialisation.” If you have completed an equivalent program to the BADAN at another university you may be eligible for admission into HADAN (subject to full admission assessment).