

# BACHELOR OF COMPUTER SCIENCE IN DATA SCIENCE (C2001) – 2026

(Specialisation : Data Science )

## Year 1 / Level 1 (48 credit points)

July/Oct Semester	<b>FIT1045</b> Introduction to programming	<b>FIT1047</b> Introduction to computer systems, networks and security	<b>FIT1058</b> Foundations of computing	Elective
February Semester	<b>FIT1008</b> Fundamentals of algorithms [FIT1045 & (FIT1058 or MAT1830)]	<b>FIT1043</b> Introduction to data science	<b>FIT1055</b> IT professional practice and ethics [12 pts FIT study]	Elective

## Year 2 / Level 2 (48 credit points)

July Semester	<b>FIT2014</b> Theory of computation [FIT1008 & (FIT1058 or MAT1830)]	<b>FIT2086</b> Modelling for data analysis [FIT1045 & (FIT1058 or MAT1841)]	<b>FIT2004</b> Algorithms and data structures [FIT1008 & MAT1830 or FIT1058]	Elective
February Semester	<b>FIT2094</b> Databases [FIT1045 or FIT1051]	<b>FIT2179</b> Data visualisation [FIT1045 or FIT1008]	Elective	Elective

## Year 3 / Level 3 (48 credit points)

July Semester	<b>FIT3163</b> Data science project 1 [FIT1043, FIT1055, FIT2004, FIT2094, FIT2086 and 72 pts of study inc. 60 pts of FIT/ MAT units]	<b>FIT3152</b> Data analytics [FIT2094 and FIT2086]	<b>*Level 3</b> Data Science Approved Elective	Elective
Summer Semester	<b>FIT3164</b> Data science project 2 [FIT3163]			
February Semester	<b>FIT3045</b> Industry-based learning (18 points) FIT3045 is equivalent to ONE Level 3 Data Science Approved Electives (6 points)+ TWO Level 3 Electives (12 points)			

### Important:

- **Co-requisites and Pre-requisites units are subject to change. Please refer to the relevant [Monash unit handbook](#) for the most up-to-date information.**
- **Students must also complete all [General Studies](#) requirements as part of their degree.**

### List of elective units offered at the School of Information Technology, Monash University Malaysia.

The following electives are offered at both the Australia and Malaysia campuses. If you intend to apply for the [global intercampus program](#), please refer to the [course handbook](#) for electives which are offered specifically at the Australia campus. In addition to the minimum two level 3 data science approved electives, you can utilize the elective slots in the course map to enrol for additional level 3 data science electives.

Apart from the listed electives below, you may opt to enrol for electives offered by other courses at Monash University, provided that you fulfil the unit prerequisites.

#### Level 1 Electives

FIT1051 Programming fundamentals in JAVA  
FIT1056 Introduction to software engineering  
FIT1061 Introduction to artificial intelligence

#### Level 2 Electives

FIT2081 Mobile application development  
FIT2093 Cybersecurity tools and techniques  
FIT2099 Object oriented design and implementation  
FIT2100 Operating systems  
FIT2101 Software engineering process & management  
FIT2102 Programming paradigms  
FIT2107 Software quality and testing  
FIT2109 Computer science workshop

#### \*Level 3 Data Science Approved Electives

FIT3003 Business intelligence & data warehousing  
FIT3154 Advanced data analysis  
FIT3181 Deep learning  
FIT3182 Big data management and processing  
FIT3183 Malicious AI and dark side security

#### Level 3 Electives

FIT3077 Software engineering: Architecture and design  
FIT3080 Artificial intelligence  
FIT3134 Entrepreneurship  
FIT3143 Parallel computing  
FIT3155 Advanced data structures and algorithms  
FIT3159 Computer architecture  
FIT3175 Usability

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## Additional Notes

<b>Credit points</b>	Unless specified, all units are worth 6 credit points Bachelor of Computer Science in Data Science 24 units x 6 credit points = Total of 144 credit points
<b>Year Level Requirements</b>	1) Normally 48 points and a maximum of 60 points of first year level units will be counted. 2) At least 36 points must be completed at third year level.
<b>Unit requisites</b>	All pre-requisite and co-requisite requirements must be undertaken to be able to enrol into a specific unit.
<b>Duration of degree</b>	3 years full-time
<b>Course duration</b>	You have a maximum of 8 years to complete this course including any periods of intermission and suspension and must be continuously enrolled throughout.
<b>Monash University handbook</b>	Students should follow the course requirements for the year the course was commenced <a href="https://www.monash.edu/students/handbooks/faculty-info/undergrad/it">https://www.monash.edu/students/handbooks/faculty-info/undergrad/it</a>

***While the information provided here was correct at the time of viewing and/or printing, you should carefully read all official correspondence and other sources of information for students to stay informed about any changes.***

***The placement and offering of units may be rearranged or revised based on school resources or faculty planning.***

***If you opt for the IBL and the semester placement of FIT3045 differs from the above, and/or opt for an overseas exchange program, you may need to either overload a semester, undertake a summer unit or extend an additional semester in order to complete your course. Please consult the course coordinator.***