

# Bachelor of Information Technology and Bachelor of Science (C2003) – 2020

## Business information systems major

### Year 1 (48 credit points)

<b>First Semester</b>	<b>FIT1051</b> Programming fundamentals in java	<b>FIT1006</b> Business information analysis** [Yr 12 Maths or <a href="#">MTH1010</a> ]	Science major approved level 1 sequence 1	Approved level 1 science sequence 2
<b>Second Semester</b>	<b>FIT1047</b> Introduction to computer systems, networks and security	<b>FIT Elective 1</b>	Science major approved level 1 sequence 1	Approved Level 1 science sequence 2

### Year 2 (48 credit points)

<b>First Semester</b>	<b>FIT1049</b> IT professional practice  [12 pts FIT study]	<b>FIT2081</b> Mobile applications development [One of FIT1045, FIT1048 or FIT1051] OR <b>FIT2095</b> eBusiness software technologies [FIT1051]	Science major - level 2	One of SCI1020, STA1010, MTH1020, MTH1030 [or level one Science elective if already taken as part of another sequence]
<b>Second Semester</b>	<b>FIT2094</b> Databases  [One of FIT1045, FIT1048 or FIT1051]	<b>FIT2090</b> Business information systems and processes [24pts FIT or BusEco study]	Science major - level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (advanced)

### Year 3 (48 credit points)

<b>First Semester</b>	<b>FIT2001</b> Systems development [24pts FIT study]	<b>FIT3174</b> IT strategy and governance [24pts FIT level 2 study] OR <b>FIT3138</b> Real time enterprise systems [12 pts Level 2 FIT, SCI, ENG study]	Science major - level 3	Science elective
<b>Second Semester</b>	<b>FIT2002</b> IT project management [36pts level 1 study including one of (FIT1040, FIT1045, FIT1048, FIT1051, ENG1003)]	<b>FIT3003</b> Business intelligence and data warehousing [FIT2094] OR <b>FIT3152</b> Data analytics [FIT1006]	Science major - level 3	Science elective – level 2 or 3

### Year 4 (48 credit points)

<b>First Semester</b>	<b>FIT3047</b> Industry experience studio project 1 [Refer to Handbook]	<b>FIT Elective 2</b>	Science major - level 3	Science elective – level 2 or 3
<b>Second Semester</b>	<b>FIT3048</b> Industry experience studio project 2 [FIT3047]	<b>FIT3158</b> Business decision models  [24pts FIT or BusEco study and one of FIT1006, ETC1000, STA1010]	Science major - level 3	Science elective – level 2 or 3

# Bachelor of Information Technology and Bachelor of Science (C2003) – 2020

## Computer networks and security major

### Year 1 (48 credit points)

<b>First Semester</b>	<b>FIT1045</b> Algorithms and programming fundamentals in python [VCE Mathematics Methods or Specialist Mathematics units 3 & 4 with a study score of 25 or MTH1010] OR <b>FIT1048</b> Fundamentals of C++ OR <b>FIT1051</b> Programming fundamentals in java	<b>FIT1047</b> Introduction to computer systems, networks and security	Science major approved level 1 sequence 1	Approved level 1 science sequence 2
<b>Second Semester</b>	<b>FIT1049</b> IT professional practice [12 pts FIT study]	<b>FIT Elective 1</b>	Science major approved level 1 sequence 1	Approved Level 1 science sequence 2

### Year 2 (48 credit points)

<b>First Semester</b>	<b>FIT2001</b> Systems development [24pts FIT study] OR <b>FIT2099</b> Object-oriented design and implementation [One of FIT1045, FIT1048 or FIT1051]	<b>FIT2093</b> Introduction to cyber security  [FIT1047 and one of FIT1045, FIT1048 or FIT1051]	Science major - level 2	One of SCI1020, STA1010, MTH1020, MTH1030 [or level one Science elective if already taken as part of another sequence]
<b>Second Semester</b>	<b>FIT2094</b> Databases  [One of FIT1045, FIT1048 or FIT1051]	<b>FIT2100</b> Operating systems  [FIT1047]	Science major - level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (advanced)

### Year 3 (48 credit points)

<b>First Semester</b>	<b>FIT Elective 2</b>	<b>FIT3165</b> Computer networks [FIT2100]	Science major - level 3	Science elective
<b>Second Semester</b>	<b>FIT2002</b> IT project management [36pts level 1 study including one of (FIT1040, FIT1045, FIT1048, FIT1051, ENG1003)]	<b>FIT3031</b> Network security [FIT1047 and FIT2093]	Science major - level 3	Science elective – level 2 or 3

### Year 4 (48 credit points)

<b>First Semester</b>	<b>FIT3047</b> Industry experience studio project 1 [Refer to Handbook]	<b>FIT3173</b> Software security [One of FIT1045 or FIT1048 or FIT1051]	Science major - level 3	Science elective – level 2 or 3
<b>Second Semester</b>	<b>FIT3048</b> Industry experience studio project 2 [FIT3047]	<b>FIT2081</b> Mobile applications development [One of FIT1045 or FIT1048 or FIT1051] OR <b>FIT3142</b> Distributed computing [FIT2100 and FIT3165] OR <b>FIT3168</b> IT forensics [FIT2093]	Science major - level 3	Science elective – level 2 or 3

## Bachelor of Information Technology and Bachelor of Science (C2003) – 2020

### Games development major

#### Year 1 (48 credit points)

<b>First Semester</b>	<b>FIT1047</b> Introduction to computer systems, networks and security	<b>FIT1033</b> Foundations of 3D	Science major approved level 1 sequence 1	Approved level 1 science sequence 2
<b>Second Semester</b>	<b>FIT2073</b> Game design studio 1	<b>FIT1048</b> Fundamentals of C++	Science major approved level 1 sequence 1	Approved Level 1 science sequence 2

#### Year 2 (48 credit points)

<b>First Semester</b>	<b>FIT2001</b> Systems development [24pts FIT study] OR <b>FIT2099</b> Object-oriented design and implementation [One of FIT1045, FIT1048 or FIT1051]	<b>FIT2096</b> Games programming 1  [FIT1048]	Science major - level 2	One of SCI1020, STA1010, MTH1020, MTH1030 [or level one Science elective if already taken as part of another sequence]
<b>Second Semester</b>	<b>FIT1049</b> IT professional practice  [12 pts FIT study]	<b>FIT2097</b> Games programming 2  [FIT2096]	Science major - level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (advanced)

#### Year 3 (48 credit points)

<b>First Semester</b>	<b>FIT2094</b> Databases  [One of FIT1045, FIT1048 or FIT1051]	<b>FIT3094</b> Artificial life, artificial intelligence and virtual environments [FIT2096]	Science major - level 3	Science elective
<b>Second Semester</b>	<b>FIT2002</b> IT project management [36pts level 1 study including one of (FIT1040, FIT1045, FIT1048, FIT1051, ENG1003)]	<b>FIT3145</b> Game design studio 2  [FIT2073 & FIT2096]	Science major - level 3	Science elective – level 2 or 3

#### Year 4 (48 credit points)

<b>First Semester</b>	<b>FIT3039</b> Studio project 1 [(FIT2091 and (FIT2087 or FIT2098)) or (FIT2073 and FIT2096)]	<b>FIT Elective</b>	Science major - level 3	Science elective – level 2 or 3
<b>Second Semester</b>	<b>FIT3040</b> Studio project 2 [FIT3039]	<b>FIT3146</b> Maker lab [One of FIT1045, FIT1048 or FIT1051, ENG1003 and 90pts of study]	Science major - level 3	Science elective – level 2 or 3

# Bachelor of Information Technology and Bachelor of Science (C2003) – 2020

## Interactive media major

### Year 1 (48 credit points)

<b>First Semester</b>	<b>FIT1045</b> Algorithms and programming fundamentals in python [VCE Mathematics Methods or Specialist Mathematics units 3 & 4 with a study score of 25 or MTH1010] OR <b>FIT1048</b> Fundamentals of C++ OR <b>FIT1051</b> Programming fundamentals in java	<b>FIT1033</b> Foundations of 3D	Science major approved level 1 sequence 1	Approved level 1 science sequence 2
<b>Second Semester</b>	<b>FIT1047</b> Introduction to computer systems, networks and security	<b>FIT1046</b> Creative computing foundations	Science major approved level 1 sequence 1	Approved Level 1 science sequence 2

### Year 2 (48 credit points)

<b>First Semester</b>	<b>FIT1049</b> IT professional practice  [12 pts FIT study]	<b>FIT2091</b> Creative computing studio 1  [FIT1046]	Science major - level 2	One of SCI1020, STA1010, MTH1020, MTH1030 [or level one Science elective if already taken as part of another sequence]
<b>Second Semester</b>	<b>FIT2087</b> 3D character animation [FIT1033] OR <b>FIT2098</b> Virtual and augmented reality	<b>FIT2092</b> Creative computing studio 2 [FIT2091]	Science major - level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (advanced)

### Year 3 (48 credit points)

<b>First Semester</b>	<b>FIT2001</b> Systems development [24pts FIT study] OR <b>FIT2099</b> Object-oriented design and implementation [One of FIT1045, FIT1048 or FIT1051]	<b>FIT2094</b> Databases  [One of FIT1045, FIT1048 or FIT1051]	Science major - level 3	Science elective
<b>Second Semester</b>	<b>FIT2002</b> IT project management [36pts level 1 study including one of (FIT1040, FIT1045, FIT1048, FIT1051, ENG1003)]	<b>FIT3172</b> Sonics  [24 points of level 2]	Science major - level 3	Science elective – level 2 or 3

### Year 4 (48 credit points)

<b>First Semester</b>	<b>FIT3039</b> Studio project 1 [(FIT2091 and (FIT2087 or FIT2098)) or (FIT2073 and FIT2096)]	<b>FIT3169</b> Immersive environments  [FIT1033]	Science major - level 3	Science elective – level 2 or 3
<b>Second Semester</b>	<b>FIT3040</b> Studio project 2 [FIT3039]	<b>FIT3146</b> Maker lab [One of FIT1045, FIT1048 or FIT1051, ENG1003 and 90pts of study]	Science major - level 3	Science elective – level 2 or 3

# Bachelor of Information Technology and Bachelor of Science (C2003) – 2020

## Software development major

### Year 1 (48 credit points)

<b>First Semester</b>	<b>FIT1045</b> Algorithms and programming fundamentals in python [VCE Mathematics Methods or Specialist Mathematics units 3 & 4 with a study score of 25 or MTH1010] OR <b>FIT1048</b> Fundamentals of C++ OR <b>FIT1051</b> Programming fundamentals in java	<b>FIT1050</b> Web fundamentals	Science major approved level 1 sequence 1	Approved level 1 science sequence 2
<b>Second Semester</b>	<b>FIT1047</b> Introduction to computer systems, networks and security	<b>FIT Elective 1</b>	Science major approved level 1 sequence 1	Approved Level 1 science sequence 2

### Year 2 (48 credit points)

<b>First Semester</b>	<b>FIT2001</b> Systems development [24pts FIT study]	<b>FIT2094</b> Databases [One of FIT1045, FIT1048 or FIT1051]	Science major - level 2	One of SCI1020, STA1010, MTH1020, MTH1030 [or level one Science elective if already taken as part of another sequence]
<b>Second Semester</b>	<b>FIT1049</b> IT professional practice  [12 pts FIT study]	<b>FIT2104</b> Web database interface [FIT2094] OR <b>FIT2081</b> Mobile application development [FIT1045, FIT1048 or FIT1051]	Science major - level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (advanced)

### Year 3 (48 credit points)

<b>First Semester</b>	<b>FIT Elective 2</b>	<b>FIT3175</b> Usability [FIT1045, FIT1048 or FIT1051]	Science major - level 3	Science elective
<b>Second Semester</b>	<b>FIT2002</b> IT project management [36pts level 1 study including one of (FIT1040, FIT1045, FIT1048, FIT1051, ENG1003)]	<b>FIT Elective 3</b>	Science major - level 3	Science elective – level 2 or 3

### Year 4 (48 credit points)

<b>First Semester</b>	<b>FIT3047</b> Industry experience studio project 1 [Refer to Handbook]	<b>Software Development unit</b> (choose from list)	Science major - level 3	Science elective – level 2 or 3
<b>Second Semester</b>	<b>FIT3048</b> Industry experience studio project 2 [FIT3047]	<b>Software Development unit</b> (choose from list)	Science major - level 3	Science elective – level 2 or 3

### Software Development units:

FIT3077 Software engineering: architecture and design	FIT3173 Software security
FIT3134 IT-based entrepreneurship or BEX3411 Entrepreneurship	FIT3176 Advanced database design
FIT3146 Maker lab	FIT3178 iOS app development
FIT3157 Advanced web design	

**Bachelor of Science Majors and Sequences:**

For information on Science majors and approved sequences, refer to <https://www.monash.edu/science/current-students/manage-your-science-studies>

**Notes**

<b>Credit points</b>	Unless specified, all units are worth 6 credit points Bachelor of Information Technology and Bachelor of Science 32 units x 6cp = Total of 192 credit points
<b>Unit requisites</b>	All pre-requisite and co-requisite requirements must be undertaken in order to be able to enrol into a specific unit
<b>Duration of degree</b>	4 years full-time, 8 years part-time
<b>Time limit</b>	Time limit: 10 years. Students have ten years in which to complete this award from the time they commence first year. Periods of intermission are counted as part of the ten years.
<b>Monash University handbook</b>	Students should follow the course requirements for the year the course was commenced <a href="https://handbook.monash.edu/browse/Faculty%20of%20Information%20Technology">https://handbook.monash.edu/browse/Faculty%20of%20Information%20Technology</a>