**Engineering**

# Bachelor of Engineering (Honours) / Computer Science (3785)

## Mining Engineering (MINEAH) / Computer Science (COMPA1)

## T1 Entry 2025 Sample Plan

| Year 1 | |
|---|---|
| Term 1 | **COMP1511** Programming Fundamentals |
| | **MATH1131** Mathematics 1A OR **MATH1141** Higher Mathematics 1A |
| | **PHYS1121** Physics 1A OR **PHYS1131** Higher Physics 1A |
| Term 2 | **MATH1231** Mathematics 1B OR **MATH1241** Higher Mathematics 1B |
| | **COMP1531** Software Engineering Fundamentals |
| | |
| Term 3 | **DESN1000** Introduction to Engineering Design and Innovation |
| | **ENGG1300** Engineering Mechanics |
| | **GEOS1111** Investigating Earth and Its Evolution |

| Year 2 | |
|---|---|
| Term 1 | **COMP1521** Computer Systems Fundamentals |
| | **MATH2018** Engineering Mathematics 2D OR **MATH2019** Engineering Mathematics 2E |
| | **CEIC2001** Fluid and Particle Mechanics |
| Term 2 | **MERE2810** Mineral Resource Geology & Geophysics |
| | **DESN2000** Engineering Design and Professional Practice |
| | **ENGG2400** Mechanics of Solids 1 |
| Term 3 | **MATH2089** Numerical Methods and Statistics |
| | **COMP2521** Data Structures and Algorithms |
| | |

| Year 3 | |
|---|---|
| Term 1 | **MINE3430** Mining Systems |
| | **MINE3220** Resource Estimation |
| | **MINE3310** Mining Geomechanics |
| Term 2 | **COMP2511** Object-Oriented Design and Programming |
| | **MINE3230** Mine Planning |
| | |
| Term 3 | **MINE3510** Mine Ventilation |
| | **MINE3630** Rock Breakage |
| | **MINE2820** Minerals Processing |

| Year 4 | |
|---|---|
| Term 1 | **COMP3121** Algorithm Design and Analysis OR **COMP3821** Extended Algorithm Design and Analysis |
| | **COMP3900** Computer Science Project |
| | |
| Term 2 | **MINE4710** Mine Management |
| | **MINE3910** Socio-Environmental Aspects of Mining |
| | **Discipline Elective** |
| Term 3 | **COMP4920** Professional Issues and Ethics in Information Technology |
| | **Computing Elective** |
| | **Computing Elective** |

| Year 5 | |
|---|---|
| Term 1 | **MERE4951** Research Thesis A |
| | **MINE4250** Mine Design and Feasibility Project |
| | **MINE4310** Mine Geotechnical Engineering |
| Term 2 | **MERE4952** Research Thesis B |
| | **Computing Elective** |
| | **Discipline Elective** |
| Term 3 | **MERE4953** Research Thesis C |
| | **Computing Elective** |
| | **Computing Elective** |

**NOTES**

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Compulsory Training Component: There is a program requirement of 60 days approved Industrial Training ENGG4999

**Engineering**

# Bachelor of Engineering (Honours) / Computer Science (3785)

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## T2 Entry 2025 Sample Plan

| Year 1 | |
|---|---|
| Term 2 | **COMP1511** Programming Fundamentals |
| | **MATH1131** Mathematics 1A OR **MATH1141** Higher Mathematics 1A |
| | **PHYS1121** Physics 1A OR **PHYS1131** Higher Physics 1A |
| Term 3 | **DESN1000** Introduction to Engineering Design and Innovation |
| | **ENGG1300** Engineering Mechanics |
| | **GEOS1111** Investigating Earth and Its Evolution |
| Term 1 | **MATH1231** Mathematics 1B OR **MATH1241** Higher Mathematics 1B |
| | **COMP1521** Computer Systems Fundamentals |
| | |

| Year 2 | |
|---|---|
| Term 2 | **COMP1531** Software Engineering Fundamentals |
| | **DESN2000** Engineering Design and Professional Practice |
| | **ENGG2400** Mechanics of Solids 1 |
| Term 3 | **MATH2089** Numerical Methods and Statistics |
| | **MINE2820** Minerals Processing |
| | |
| Term 1 | **MATH2018** Engineering Mathematics 2D OR **MATH2019** Engineering Mathematics 2E |
| | **CEIC2001** Fluid and Particle Mechanics |
| | **MINE3430** Mining Systems |

| Year 3 | |
|---|---|
| Term 2 | **MERE2810** Mineral Resource Geology & Geophysics |
| | **MINE3910** Socio-Environmental Aspects of Mining |
| | **MINE4710** Mine Management |
| Term 3 | **MINE3510** Mine Ventilation |
| | **MINE3630** Rock Breakage |
| | |
| Term 1 | **MINE3220** Resource Estimation |
| | **MINE3310** Mining Geomechanics |
| | **COMP2521** Data Structures and Algorithms |

| Year 4 | |
|---|---|
| Term 2 | **MINE3230** Mine Planning |
| | **COMP2511** Object-Oriented Design and Programming |
| | **Computing Elective** |
| Term 3 | **COMP3900** Computer Science Project |
| | **Computing Elective** |
| | |
| Term 1 | **COMP3121** Algorithm Design and Analysis OR **COMP3821** Extended Algorithm Design and Analysis |
| | **MINE4250** Mine Design and Feasibility Project |
| | **MINE4310** Mine Geotechnical Engineering |

| Year 5 | |
|---|---|
| Term 2 | **MERE4951** Research Thesis A |
| | **Discipline Elective** |
| | **Computing Elective** |
| Term 3 | **MERE4952** Research Thesis B |
| | **COMP4920** Professional Issues and Ethics in Information Technology |
| | **Computing Elective** |
| Term 1 | **MERE4953** Research Thesis C |
| | **Computing Elective** |
| | **Discipline Elective** |

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Engineering

# Bachelor of Engineering (Honours) / Computer Science (3785)

## Mining Engineering (MINEAH) / Computer Science (COMPA1)

## T3 Entry 2025 Sample Plan

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|
| Term 3 | **COMP1511** Programming Fundamentals | **COMP1531** Software Engineering Fundamentals | **MINE2820** Minerals Processing | **COMP3900** Computer Science Project | **MERE4951** Research Thesis A |
| | **GEOS1111** Investigating Earth and Its Evolution | **MATH2089** Numerical Methods and Statistics | **MINE3510** Mine Ventilation | **COMP3121** Algorithm Design and Analysis | **Discipline Elective** |
| | | | **MINE3630** Rock Breakage | **Computing Elective** | **Computing Elective** |
| Term 1 | **PHYS1121** Physics 1A OR **PHYS1131** Higher Physics 1A | **MATH2018** Engineering Mathematics 2D OR **MATH2019** Engineering Mathematics 2E | **COMP2521** Data Structures and Algorithms | **MINE3310** Mining Geomechanics | **MERE4952** Research Thesis B |
| | **MATH1131** Mathematics 1A OR **MATH1141** Higher Mathematics 1A | **MINE3430** Mining Systems | **MINE3220** Resource Estimation | **MINE4250** Mine Design and Feasibility Project | **Computing Elective** |
| | **DESN1000** Introduction to Engineering Design and Innovation | **CEIC2001** Fluid and Particle Mechanics | | **MINE4310** Mine Geotechnical Engineering | **Computing Elective** |
| Term 2 | **MATH1231** Mathematics 1B OR **MATH1241** Higher Mathematics 1B | **DESN2000** Engineering Design and Professional Practice | **COMP2511** Object-Oriented Design and Programming | **MINE3910** Socio-Environmental Aspects of Mining | **MERE4953** Research Thesis C |
| | **ENGG1300** Engineering Mechanics | **ENGG2400** Mechanics of Solids 1 | **MINE3230** Mine Planning | **COMP4920** Professional Issues and Ethics in Information Technology | **Computing Elective** |
| | **COMP1521** Computer Systems Fundamentals | **MERE2810** Mineral Resource Geology & Geophysics | **MINE4710** Mine Management | | **Discipline Elective** |

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