

ELECTRICAL ENGINEERING, TESTAMUR MAJOR (T102)

Western Sydney University Major Code: T102

Previous Code: KT3172, MT3053

Available to students in other Western Sydney University programs?

No

The Electrical Engineering major includes core subjects from all branches of electrical engineering. Graduates will work in the fields of electronic components, computers, electro-magnetics, power generation and distribution systems, power and control in public utilities, telecommunications, manufacturing, and electrical systems. This major includes a mandatory 12-week industrial placement as a completion requirement.

Location

| Campus | Mode | Advice |
|---|----------|--|
| Parramatta Campus - Victoria Road | Internal | Major Advice (edbe@westernsydney.edu.au) |
| Parramatta City Campus-Macquarie Street | Internal | Major advice (edbe@westernsydney.edu.au) |
| Penrith Campus | Internal | Major Advice (edbe@westernsydney.edu.au) |
| Sydney City Campus | Internal | Major Advice (edbe@westernsydney.edu.au) |

Recommended Sequence

This major is included in Bachelor of Engineering Science, Bachelor of Engineering (Honours), Bachelor of Engineering Advanced (Honours) and Bachelor of Engineering (Honours)/Bachelor of Business.

Please follow the recommended sequence for your program as noted below.

3691 Bachelor of Engineering Science

This major will be offered at Parramatta South, Penrith and Sydney City campuses

Qualification for this award requires the successful completion of 240 credit points, which include the subjects listed in the recommended sequence below.

* All students undertaking the Bachelor of Engineering Science are required to enrol in MATH 1021 (<https://hbook.westernsydney.edu.au/archives/2021-2022/search/?P=MATH%201021>) Mathematics for Engineers Preliminary and undertake a readiness test at the beginning of their study.

The readiness test will be conducted at the beginning of the first semester of enrolment and the result will be used to determine whether a student will remain in MATH 1021 (<https://hbook.westernsydney.edu.au/archives/2021-2022/search/?P=MATH%201021>) Mathematics for Engineers Preliminary or be transferred by the School to MATH 1016 (<https://hbook.westernsydney.edu.au/archives/2021-2022/search/?P=MATH%201016>) Mathematics for Engineers 1.

Students remaining in MATH 1021 (<https://hbook.westernsydney.edu.au/archives/2021-2022/search/?P=MATH%201021>) Mathematics for Engineers Preliminary will be required

to complete MATH 1016 (<https://hbook.westernsydney.edu.au/archives/2021-2022/search/?P=MATH%201016>) Mathematics for Engineers 1 during second semester and will be encouraged to complete MATH 1019 (<https://hbook.westernsydney.edu.au/archives/2021-2022/search/?P=MATH%201019>) Mathematics for Engineers 2 during the Summer session.

Students who finish MATH 1021 (<https://hbook.westernsydney.edu.au/archives/2021-2022/search/?P=MATH%201021>) Mathematics for Engineers Preliminary will then use this subject as an elective.

Start-year intake

| Course | Title | Credit Points |
|------------------------------|---|---------------|
| Year 1 | | |
| Autumn session | | |
| | Select one of the following: | 10 |
| MATH 1021 | Mathematics for Engineers Preliminary | |
| MATH 1016 | Mathematics for Engineers 1 | |
| ELEC 1006 | Engineering Computing | 10 |
| ENGR 1011 | Engineering Physics | 10 |
| ENGR 1024 | Introduction to Engineering Practice | 10 |
| | Credit Points | 40 |
| Spring session | | |
| | Select one of the following: | 10 |
| MATH 1019 | Mathematics for Engineers 2 | |
| MATH 1016 | Mathematics for Engineers 1 | |
| ELEC 1003 | Electrical Fundamentals | 10 |
| ENGR 1018 | Fundamentals of Mechanics | 10 |
| | Select one elective (Level 1 or higher) | 10 |
| | Credit Points | 40 |
| Year 2 | | |
| Autumn session | | |
| ENGR 3029 | Specialisation Workshop 1 | 10 |
| ELEC 2001 | Circuit Theory | 10 |
| ELEC 2011 | Signals and Systems | 10 |
| ELEC 1001 | Digital Systems 1 | 10 |
| | Credit Points | 40 |
| Spring session | | |
| ENGR 3030 | Specialisation Workshop 2 | 10 |
| ELEC 2009 | Microprocessor Systems | 10 |
| ELEC 2010 | Power and Machines | 10 |
| ENGR 3006 | Control Systems | 10 |
| | Credit Points | 40 |
| Year 3 | | |
| Autumn session | | |
| ENGR 3013 | Engineering Science Project 1 | 10 |
| ELEC 3001 | Communication Systems | 10 |
| ELEC 3006 | Electrical Machines 1 | 10 |
| ELEC 2004 | Electronics | 10 |
| | Credit Points | 40 |
| Spring session | | |
| ENGR 3014 | Engineering Science Project 2 | 10 |
| ELEC 3009 | Power Systems | 10 |
| ELEC 3003 | Digital Signal Processing | 10 |
| | Select one elective (Level 2 or higher) | 10 |
| Industrial Experience | | |

| | | |
|-----------|--|------------|
| ENGR 2033 | Industrial Experience (Engineering Technologist) | 0 |
| | Credit Points | 40 |
| | Total Credit Points | 240 |

Mid-year intake

| Course | Title | Credit Points |
|---|---------------------------------------|---------------|
| Year 1 | | |
| Spring session | | |
| Select one of the following: | | 10 |
| MATH 1021 | Mathematics for Engineers Preliminary | |
| MATH 1016 | Mathematics for Engineers 1 | |
| ELEC 1003 | Electrical Fundamentals | 10 |
| ENGR 1018 | Fundamentals of Mechanics | 10 |
| ENGR 1024 | Introduction to Engineering Practice | 10 |
| | Credit Points | 40 |
| Autumn session | | |
| Select one of the following: | | 10 |
| MATH 1019 | Mathematics for Engineers 2 | |
| MATH 1016 | Mathematics for Engineers 1 | |
| ELEC 1006 | Engineering Computing | 10 |
| ENGR 1011 | Engineering Physics | 10 |
| Select one elective | | 10 |
| • Elective unit must be Level 1 or higher | | |
| | Credit Points | 40 |

Year 2

| Course | Title | Credit Points |
|-----------------------|---------------------------|---------------|
| Spring session | | |
| Autumn session | | |
| ENGR 3029 | Specialisation Workshop 1 | 10 |
| ELEC 2009 | Microprocessor Systems | 10 |
| ELEC 2010 | Power and Machines | 10 |
| ENGR 3006 | Control Systems | 10 |
| | Credit Points | 40 |
| Autumn session | | |
| ENGR 3030 | Specialisation Workshop 2 | 10 |
| ELEC 2001 | Circuit Theory | 10 |
| ELEC 2011 | Signals and Systems | 10 |
| ELEC 1001 | Digital Systems 1 | 10 |
| | Credit Points | 40 |

Year 3

| Course | Title | Credit Points |
|---|-------------------------------|---------------|
| Spring session | | |
| Autumn session | | |
| ENGR 3013 | Engineering Science Project 1 | 10 |
| ELEC 3009 | Power Systems | 10 |
| ELEC 3003 | Digital Signal Processing | 10 |
| Select one elective (Level 2 or higher) | | 10 |
| | Credit Points | 40 |

| Course | Title | Credit Points |
|-----------------------|-------------------------------|---------------|
| Autumn session | | |
| Spring session | | |
| ENGR 3014 | Engineering Science Project 2 | 10 |
| ELEC 3001 | Communication Systems | 10 |
| ELEC 3006 | Electrical Machines 1 | 10 |
| ELEC 2004 | Electronics | 10 |

Industrial Experience

| Course | Title | Credit Points |
|-----------------------|---------------------------|---------------|
| Spring session | | |
| Autumn session | | |
| ELEC 3009 | Power Systems | 10 |
| ELEC 3003 | Digital Signal Processing | 10 |

3771 Bachelor of Engineering Advanced (Honours)

This major will be offered at Engineering Innovation Hub which is part of Parramatta City campus.

Start-year intake

| Course | Title | Credit Points |
|-----------------------|--|---------------|
| Year 1 | | |
| Autumn session | | |
| MATH 1034 | Mathematics for Engineers 1 (Advanced) | 10 |
| ENGR 1024 | Introduction to Engineering Practice | 10 |
| ENGR 1047 | Advanced Engineering Physics 1 | 10 |
| ENGR 1045 | Engineering Programming Fundamentals | 10 |
| | Credit Points | 40 |
| Spring session | | |
| ELEC 1009 | Electrical Circuit Fundamentals | 10 |
| MATH 1035 | Mathematics for Engineers 2 (Advanced) | 10 |
| ENGR 2023 | Advanced Engineering Physics 2 | 10 |
| COMP 2008 | Computer Organisation | 10 |
| | Credit Points | 40 |

| Course | Title | Credit Points |
|-----------------------|--|---------------|
| Year 2 | | |
| Autumn session | | |
| ELEC 2013 | Circuits and Signals | 10 |
| ELEC 1001 | Digital Systems 1 | 10 |
| ELEC 2004 | Electronics | 10 |
| ELEC 2014 | Mathematics for Electrical Engineers 1 | 10 |
| | Credit Points | 40 |
| Spring session | | |
| ELEC 2009 | Microprocessor Systems | 10 |
| ELEC 2015 | Mathematics for Electrical Engineers 2 | 10 |
| ELEC 2010 | Power and Machines | 10 |

| Course | Title | Credit Points |
|---|-------------------------------|---------------|
| Autumn session | | |
| Spring session | | |
| ENGR 3030 | Specialisation Workshop 2 | 10 |
| ELEC 2001 | Circuit Theory | 10 |
| ELEC 2011 | Signals and Systems | 10 |
| ELEC 1001 | Digital Systems 1 | 10 |
| | Credit Points | 40 |
| Year 3 | | |
| Autumn session | | |
| ENGR 3013 | Engineering Science Project 1 | 10 |
| ELEC 3009 | Power Systems | 10 |
| ELEC 3003 | Digital Signal Processing | 10 |
| Select one elective (Level 2 or higher) | | 10 |
| | Credit Points | 40 |

| Course | Title | Credit Points |
|------------------------------|---------------------------|---------------|
| Year 3 | | |
| Autumn session | | |
| ELEC 3001 | Communication Systems | 10 |
| ELEC 3006 | Electrical Machines 1 | 10 |
| Select one alternate subject | | 10 |
| Select one elective | | 10 |
| | Credit Points | 40 |
| Spring session | | |
| ELEC 3009 | Power Systems | 10 |
| ELEC 3003 | Digital Signal Processing | 10 |

| | | | | | |
|--|--|--------------------------|------------------------------|--|------------|
| ELEC 3005 | Electrical Drives | 10 | ELEC 3003 | Digital Signal Processing | 10 |
| Select one elective | | 10 | ELEC 2010 | Power and Machines | 10 |
| Industrial Experience | | | Select one alternate subject | | 10 |
| ENGR 3017 | Industrial Experience (Engineering) | 0 | | | |
| | Credit Points | 40 | | Credit Points | 40 |
| Year 4 | | | Autumn session | | |
| Autumn session | | | ELEC 3001 | Communication Systems | 10 |
| ELEC 4002 | Power Electronics | 10 | ELEC 3006 | Electrical Machines 1 | 10 |
| ENGR 4037 | Advanced Engineering Thesis 1: Preliminary Investigations | 10 | Select one alternate subject | | 10 |
| Select one alternate subject | | 10 | Select one elective | | 10 |
| Select one elective | | 10 | Industrial Experience | | |
| | | | ENGR 3017 | Industrial Experience (Engineering) | 0 |
| | Credit Points | 40 | | Credit Points | 40 |
| Year 4 | | | Year 4 | | |
| Spring session | | | Spring session | | |
| ELEC 3008 | Instrumentation and Measurement | 10 | ENGR 4037 | Advanced Engineering Thesis 1: Preliminary Investigations | 10 |
| ENGR 4036 | Advanced Engineering Thesis 2: Detailed Investigations | 10 | ELEC 3008 | Instrumentation and Measurement | 10 |
| Select two alternate subjects | | 20 | ELEC 3005 | Electrical Drives | 10 |
| | Credit Points | 40 | Select one alternate subject | | 10 |
| | Total Credit Points | 320 | | Credit Points | 40 |
| Mid-year intake | | | Autumn session | | |
| Course | Title | Credit Points | ENGR 4036 | Advanced Engineering Thesis 2: Detailed Investigations | 10 |
| Year 1 | | | ELEC 4002 | Power Electronics | 10 |
| Spring session | | | Select one elective | | 10 |
| MATH 1034 | Mathematics for Engineers 1 (Advanced) | 10 | Select one alternate subject | | 10 |
| ELEC 1009 | Electrical Circuit Fundamentals | 10 | | Credit Points | 40 |
| ENGR 2023 | Advanced Engineering Physics 2 | 10 | | Total Credit Points | 310 |
| ENGR 1024 | Introduction to Engineering Practice | 10 | | | |
| | Credit Points | 40 | | | |
| Autumn session | | | | | |
| MATH 1035 | Mathematics for Engineers 2 (Advanced) | 10 | | | |
| ELEC 1001 | Digital Systems 1 | 10 | | | |
| ENGR 1047 | Advanced Engineering Physics 1 | 10 | | | |
| ENGR 1045 | Engineering Programming Fundamentals | 10 | | | |
| | Credit Points | 40 | | | |
| Year 2 | | | | | |
| Spring session | | | | | |
| ELEC 2014 | Mathematics for Electrical Engineers 1 | 10 | | | |
| ELEC 2009 | Microprocessor Systems | 10 | | | |
| COMP 2008 | Computer Organisation | 10 | | | |
| Select one elective | | 10 | | | |
| | Credit Points | 40 | | | |
| Autumn session | | | | | |
| ELEC 2015 | Mathematics for Electrical Engineers 2 | 10 | | | |
| ELEC 2013 | Circuits and Signals | 10 | | | |
| ELEC 2004 | Electronics | 10 | | | |
| select one elective | | | | | |
| Students who fail to maintain a minimum GPA of 5.0 at the end of completion of 160 Credit Points, and again at the completion of 200 Credit points will be automatically transferred to the B. Engineering (Honours) (3740) program. | | | | | |
| | Credit Points | 30 | | | |
| Year 3 | | | | | |
| Spring session | | | | | |
| ELEC 3009 | Power Systems | 10 | | | |

3740 Bachelor of Engineering (Honours)

Qualification for this award requires the successful completion of 320 credit points which include the subjects listed in the recommended sequences below.

* All students undertaking the Bachelor of Engineering (Honours) are required to enrol in MATH 1021 Mathematics for Engineers Preliminary and undertake a readiness test at the beginning of their study.

The readiness test will be conducted at the beginning of the first semester of enrolment and the result will be used to determine whether a student will remain in MATH 1021 Mathematics for Engineers Preliminary or be transferred by the School to MATH 1016 Mathematics for Engineers 1.

Students remaining in MATH 1021 Mathematics for Engineers Preliminary will be required to complete MATH 1016 Mathematics for Engineers 1 during second semester and will be encouraged to complete MATH 1019 Mathematics for Engineers 2 during the Summer session.

Start-year intake

| Course | Title | Credit Points |
|------------------------------|---------------------------------------|---------------|
| Year 1 | | |
| Autumn session | | |
| Select one of the following: | | 10 |
| MATH 1021 | Mathematics for Engineers Preliminary | |
| MATH 1016 | Mathematics for Engineers 1 | |
| ENGR 1011 | Engineering Physics | 10 |

| | | Mid-year intake | | Credit Points | |
|---|---------------------------------------|------------------------|------------|----------------------|--|
| | Course | Title | | | |
| Spring session | | | | | |
| Select one of the following: | | | | | |
| MATH 1019 | Mathematics for Engineers 2 | | 10 | | |
| MATH 1016 | Mathematics for Engineers 1 | | 10 | | |
| ENGR 1018 | Fundamentals of Mechanics | | 10 | | |
| ELEC 1003 | Electrical Fundamentals | | 10 | | |
| Select one elective (Level 1 or higher) | | | 10 | | |
| | Credit Points | | 40 | | |
| Year 2 | | | | | |
| Autumn session | | | | | |
| ELEC 2001 | Circuit Theory | | 10 | | |
| ELEC 2004 | Electronics | | 10 | | |
| ELEC 2011 | Signals and Systems | | 10 | | |
| ELEC 1001 | Digital Systems 1 | | 10 | | |
| | Credit Points | | 40 | | |
| Spring session | | | | | |
| ELEC 2009 | Microprocessor Systems | | 10 | | |
| ELEC 2006 | Engineering Electromagnetics | | 10 | | |
| ELEC 2010 | Power and Machines | | 10 | | |
| ENGR 3006 | Control Systems | | 10 | | |
| | Credit Points | | 40 | | |
| Year 3 | | | | | |
| Autumn session | | | | | |
| ELEC 3001 | Communication Systems | | 10 | | |
| ELEC 3006 | Electrical Machines 1 | | 10 | | |
| Select one alternate subject | | | 10 | | |
| Select one elective | | | 10 | | |
| | Credit Points | | 40 | | |
| Spring session | | | | | |
| ELEC 3009 | Power Systems | | 10 | | |
| ELEC 3003 | Digital Signal Processing | | 10 | | |
| ELEC 3005 | Electrical Drives | | 10 | | |
| Select one alternate subject | | | 10 | | |
| Industrial Experience | | | | | |
| ENGR 3017 | Industrial Experience (Engineering) | | 0 | | |
| | Credit Points | | 40 | | |
| Year 4 | | | | | |
| Autumn session | | | | | |
| ELEC 4002 | Power Electronics | | 10 | | |
| ENGR 4025 | Final Year Project 1 (UG Engineering) | | 10 | | |
| Select one alternate subject | | | 10 | | |
| Select one elective | | | 10 | | |
| | Credit Points | | 40 | | |
| Spring session | | | | | |
| ELEC 3008 | Instrumentation and Measurement | | 10 | | |
| ENGR 4026 | Final Year Project 2 (UG Engineering) | | 10 | | |
| Select one alternate subject | | | 10 | | |
| Select one elective | | | 10 | | |
| | Credit Points | | 40 | | |
| Total Credit Points | | | | | |
| | | | 320 | | |
| Mid-year intake | | | | | |
| Course | | | | | |
| Title | | | | | |
| Credit Points | | | | | |
| Year 1 | | | | | |
| Spring session | | | | | |
| Select one of the following: | | | | | |
| MATH 1021 | Mathematics for Engineers Preliminary | | 10 | | |
| MATH 1016 | Mathematics for Engineers 1 | | 10 | | |
| ENGR 1018 | Fundamentals of Mechanics | | 10 | | |
| ELEC 1003 | Electrical Fundamentals | | 10 | | |
| ENGR 1024 | Introduction to Engineering Practice | | 10 | | |
| | Credit Points | | 40 | | |
| Autumn session | | | | | |
| Select one of the following: | | | | | |
| MATH 1019 | Mathematics for Engineers 2 | | 10 | | |
| MATH 1016 | Mathematics for Engineers 1 | | 10 | | |
| ENGR 1011 | Engineering Physics | | 10 | | |
| ELEC 1006 | Engineering Computing | | 10 | | |
| Select one elective | | | 10 | | |
| • Elective unit must be Level 1 or higher | | | | | |
| | Credit Points | | 40 | | |
| Year 2 | | | | | |
| Spring session | | | | | |
| ELEC 2009 | Microprocessor Systems | | 10 | | |
| ELEC 2004 | Electronics | | 10 | | |
| ELEC 2010 | Power and Machines | | 10 | | |
| ELEC 3006 | Electrical Machines 1 | | 10 | | |
| | Credit Points | | 40 | | |
| Autumn session | | | | | |
| ELEC 2011 | Signals and Systems | | 10 | | |
| ELEC 1001 | Digital Systems 1 | | 10 | | |
| ELEC 2006 | Engineering Electromagnetics | | 10 | | |
| ELEC 2001 | Circuit Theory | | 10 | | |
| | Credit Points | | 40 | | |
| Year 3 | | | | | |
| Spring session | | | | | |
| ELEC 3009 | Power Systems | | 10 | | |
| ELEC 3003 | Digital Signal Processing | | 10 | | |
| ELEC 3005 | Electrical Drives | | 10 | | |
| Select one alternate subject | | | 10 | | |
| Select one elective | | | 10 | | |
| | Credit Points | | 40 | | |
| Autumn session | | | | | |
| ELEC 3001 | Communication Systems | | 10 | | |
| ELEC 3006 | Electrical Machines 1 | | 10 | | |
| Select one alternate subject | | | 10 | | |
| Select one elective | | | 10 | | |
| | Credit Points | | 40 | | |
| Year 4 | | | | | |
| Spring session | | | | | |
| ELEC 3009 | Power Systems | | 10 | | |
| ELEC 3003 | Digital Signal Processing | | 10 | | |
| ELEC 3005 | Electrical Drives | | 10 | | |
| Select one alternate subject | | | 10 | | |
| Select one elective | | | 10 | | |
| | Credit Points | | 40 | | |
| Autumn session | | | | | |
| ELEC 3001 | Communication Systems | | 10 | | |
| ELEC 3006 | Electrical Machines 1 | | 10 | | |
| Select one alternate subject | | | 10 | | |
| Select one elective | | | 10 | | |
| | Credit Points | | 40 | | |
| Industrial Experience | | | | | |
| ENGR 3017 | Industrial Experience (Engineering) | | 0 | | |
| | Credit Points | | 40 | | |
| Year 4 | | | | | |
| Spring session | | | | | |
| ELEC 3008 | Instrumentation and Measurement | | 10 | | |
| ENGR 4025 | Final Year Project 1 (UG Engineering) | | 10 | | |
| Select one alternate subject | | | 10 | | |
| Select one elective | | | 10 | | |
| | Credit Points | | 40 | | |
| Total Credit Points | | | | | |
| | | | 320 | | |

| | | | | |
|------------------------------|---------------------------------------|--------------------------|-----------------|-----------------------|
| Select one elective | 10 | ENGR 3006 | Control Systems | 10 |
| Credit Points | 40 | Credit Points | | 40 |
| Autumn session | | | | |
| ELEC 4002 | Power Electronics | 10 | ELEC 3001 | Communication Systems |
| ENGR 4026 | Final Year Project 2 (UG Engineering) | 10 | ELEC 3006 | Electrical Machines 1 |
| Select one alternate subject | 10 | Business Major Subject 4 | | 10 |
| Select one elective | 10 | Business Major Subject 5 | | 10 |
| Credit Points | 40 | Credit Points | | 40 |
| Total Credit Points | 320 | Credit Points | | 40 |

3728 Bachelor of Engineering (Honours)/ Bachelor of Business

Qualification for this award requires the successful completion of 400 credit points, which include the subjects listed in the recommended sequence below.

Start-year intake

| Course | Title | Credit Points | Credit Points | Credit Points | | |
|---------------------------------|---------------------------------------|--|--|---------------------------------------|--|--|
| Year 1 | | | | | | |
| Autumn session | | | | | | |
| MATH 1016 | Mathematics for Engineers 1 | 10 | ELEC 4002 | Power Electronics | | |
| ENGR 1011 | Engineering Physics | 10 | ENGR 4025 | Final Year Project 1 (UG Engineering) | | |
| Business Core Subject 1 | 10 | Business Professional Subject 3 | | 10 | | |
| Business Core Subject 2 | 10 | Business Major Subject 8 | | 10 | | |
| Credit Points | 40 | Credit Points | | 40 | | |
| Spring session | | | | | | |
| MATH 1019 | Mathematics for Engineers 2 | 10 | ELEC 3005 | Electrical Drives | | |
| PROC 1008 | Introduction to Materials Engineering | 10 | ENGR 4026 | Final Year Project 2 (UG Engineering) | | |
| Business Core Subject 3 | 10 | ELEC 3008 | Instrumentation and Measurement | 10 | | |
| Business Core Subject 4 | 10 | Business Professional Subject 4 | | 10 | | |
| Credit Points | 40 | Credit Points | | 40 | | |
| Year 2 | | | | | | |
| Autumn session | | | | | | |
| ELEC 1006 | Engineering Computing | 10 | The subjects listed below count towards completion of this program for students who passed these subjects in Autumn 2022 or earlier. | | | |
| Business Professional Subject 1 | 10 | ENGR 1008 - Engineering Materials, replaced by PROC 1008 - Introduction to Materials Engineering | | | | |
| Business Professional Subject 2 | 10 | | | | | |
| Business Major Subject 1 | 10 | | | | | |
| Credit Points | 40 | | | | | |
| Spring session | | | | | | |
| ELEC 1003 | Electrical Fundamentals | 10 | | | | |
| ENGR 1018 | Fundamentals of Mechanics | 10 | | | | |
| Business Major Subject 2 | 10 | | | | | |
| Business Major Subject 3 | 10 | | | | | |
| Credit Points | 40 | | | | | |
| Year 3 | | | | | | |
| Autumn session | | | | | | |
| ELEC 2001 | Circuit Theory | 10 | | | | |
| ELEC 2004 | Electronics | 10 | | | | |
| ELEC 2011 | Signals and Systems | 10 | | | | |
| ELEC 1001 | Digital Systems 1 | 10 | | | | |
| Credit Points | 40 | | | | | |
| Spring session | | | | | | |
| ELEC 2009 | Microprocessor Systems | 10 | | | | |
| ELEC 2006 | Engineering Electromagnetics | 10 | | | | |
| ELEC 2010 | Power and Machines | 10 | | | | |
| Credit Points | 40 | | | | | |

Equivalent Subjects

The subjects listed below count towards completion of this program for students who passed these subjects in Autumn 2022 or earlier.

ENGR 1008 - Engineering Materials, replaced by PROC 1008 - Introduction to Materials Engineering

Mid-year intake

| Course | Title | Credit Points |
|-------------------------|---------------------------------------|---------------|
| Year 1 | | |
| Spring session | | |
| MATH 1016 | Mathematics for Engineers 1 | 10 |
| PROC 1008 | Introduction to Materials Engineering | 10 |
| Business Core Subject 1 | | 10 |
| Business Core Subject 2 | | 10 |
| Credit Points | | 40 |
| Autumn session | | |
| MATH 1019 | Mathematics for Engineers 2 | 10 |
| ENGR 1011 | Engineering Physics | 10 |
| Business Core Subject 3 | | 10 |
| Business Core Subject 4 | | 10 |
| Credit Points | | 40 |
| Year 2 | | |
| Spring session | | |
| ELEC 1003 | Electrical Fundamentals | 10 |

| | | Alternate Subjects | | Credit Points | |
|---------------------------------|---------------------------------------|---------------------------|---|--|----|
| | | Subject | Title | | |
| ENGR 1018 | Fundamentals of Mechanics | 10 | ELEC 3004 | Digital Systems 2 | 10 |
| Business Major Subject 1 | | 10 | ELEC 4003 | Power Quality | 10 |
| Business Major Subject 2 | | 10 | ELEC 4006 | Sustainable Energy Systems | 10 |
| | Credit Points | 40 | ELEC 4005 | Smart Grids and Distributed Generation | 10 |
| Autumn session | | | ELEC 4004 | Radio and Satellite Communication | 10 |
| ELEC 1006 | Engineering Computing | 10 | ELEC 4007 | Wireless Communications | 10 |
| ELEC 2004 | Electronics | 10 | | | |
| Business Major Subject 3 | | 10 | HLTH 2003 | Biomechanics | 10 |
| Business Professional Subject 1 | | 10 | ENGR 3003 | Biomedical Electronics | 10 |
| | Credit Points | 40 | ENGR 3004 | Biomedical Signals and Data Analysis | 10 |
| Year 3 | | | BIOS 1022 | Introduction to Human Biology | 10 |
| Spring session | | | ELEC 3002 | Data Communications | 10 |
| ELEC 2009 | Microprocessor Systems | 10 | ELEC 2007 | Engineering Visualization | 10 |
| ELEC 2006 | Engineering Electromagnetics | 10 | | | |
| ELEC 2010 | Power and Machines | 10 | Minors | | |
| ENGR 3006 | Control Systems | 10 | Power Engineering, Minor (https://hbook.westernsydney.edu.au/archives/2021-2022/majors-minors/power-engineering-minor/) | | |
| | Credit Points | 40 | Telecommunications, Minor (https://hbook.westernsydney.edu.au/archives/2021-2022/majors-minors/telecommunications-minor/) | | |
| | | | Biomedical Engineering, Minor (https://hbook.westernsydney.edu.au/archives/2021-2022/majors-minors/biomedical-engineering-minor/) | | |
| | Credit Points | 40 | | | |
| Year 4 | | | Optional Elective | | |
| Spring session | | | The following subject is an optional elective unit offered to students who are engaged in a School approved project. This subject can be taken during the third year of this program, however, permission is required to enrol in the subject. | | |
| ELEC 3009 | Power Systems | 10 | | | |
| ELEC 3003 | Digital Signal Processing | 10 | | | |
| Business Major Subject 4 | | 10 | ENGR 3022 Special Technical Project | | |
| Business Major Subject 5 | | 10 | | | |
| | Credit Points | 40 | Equivalent Subjects | | |
| Autumn session | | | The subjects listed below count towards completion of this program for students who passed these subjects in 2021 or earlier. | | |
| ELEC 3001 | Communication Systems | 10 | | | |
| ELEC 3006 | Electrical Machines 1 | 10 | MECH 4005 Advanced Engineering Thesis 1: Preliminary Investigations, replaced by ENGR 4037 Advanced Engineering Thesis 1: Preliminary Investigations | | |
| Business Major Subject 6 | | 10 | | | |
| Business Major Subject 7 | | 10 | | | |
| Industrial Experience | | | MECH 4006 Advanced Engineering Thesis 2: Detailed Investigations, replaced by ENGR 4036 Advanced Engineering Thesis 2: Detailed Investigations | | |
| ENGR 3017 | Industrial Experience (Engineering) | 0 | | | |
| | Credit Points | 40 | | | |
| Year 5 | | | The subjects listed below count towards completion of this program for students who passed these subjects in Autumn 2022 or earlier. | | |
| Spring session | | | | | |
| ELEC 3005 | Electrical Drives | 10 | ENGR 1008 - Engineering Materials, replaced by PROC 1008 - Introduction to Materials Engineering | | |
| ENGR 4025 | Final Year Project 1 (UG Engineering) | 10 | | | |
| ELEC 3008 | Instrumentation and Measurement | 10 | | | |
| Business Professional Subject 3 | | 10 | | | |
| | Credit Points | 40 | Related Programs | | |
| Autumn session | | | Bachelor of Engineering Advanced (Honours) (3771) (https://hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-engineering-advanced-honours/) | | |
| ENGR 4026 | Final Year Project 2 (UG Engineering) | 10 | Bachelor of Engineering Science (3691) (https://hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-engineering-science/) | | |
| ELEC 4002 | Power Electronics | 10 | | | |
| Business Professional Subject 4 | | 10 | | | |
| Business Major Subject 8 | | 10 | | | |
| | Credit Points | 40 | | | |
| | Total Credit Points | 400 | | | |