5-year integrated Bachelor of Engineering Master of Engineering (BE ME) in Electrical Engineering with MINOR

UAC Code: 425013  Program Code: 3731  CRICOS Course Code: 074733F

A NEW program catering specifically for elite students\(^1\) and providing future engineers for Australian industry, offering:

- **Improved flexibility:**
  - choose a minor in many interest areas - psychology, music, languages, commerce, mechatronics, photovoltaics, maths, physics, computer science and more, either at UNSW or overseas . . . it’s up to you.
  - significant elective choice from year 2 onwards, including choice among 19 postgraduate electives not normally accessible to 4-year BE program students.

- **Better specialisation:**
  - maximise your learning in the Electrical Engineering disciplines of your choice
  - work right at the cutting edge on your fourth and fifth year project.

- **More design:**
  - coursework thread in engineering design from year 1 to year 4

- **Easier integration with international exchange**
  - Four to six courses can be arranged overseas as a part of the minor.


**Contact:** Dr Ray Eaton, Director of Academic Studies, r.eaton@unsw.edu.au, Ph: 02 9385 4059

Be the first to take advantage of this leading new program from UNSW Engineering, the largest faculty of engineering in Australia, recognised for excellence throughout Asia.

\(^1\) ATAR score of 95 minimum
Minors for the BE ME in Electrical Engineering program

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Minors consist of a minimum of 4 courses and a maximum of 6 courses, mutually agreed upon by the School of Electrical Engineering & Telecommunications and the School providing the minor. Minors taken within the Faculty of Engineering must consist of a maximum of 4 courses as 2 general education courses must be taken outside the Faculty.

Music Minor
Year 2 MUSC1101 Music reinvented
Year 3/4/5 Select two courses in Musicianship
AND Select one from the following: Electronic Music; Film Music; Popular Music; Music history; Psychology of Music; Music analysis; Ethnomusicology; Musicianship C

Language Minor
Year 2/3/4/5 Select six language courses are available in different languages

Commerce Minor
Year 2/3/4/5 ACCTB2 Accounting
FINSB2 Finance
ECONC2 Business Economics
ECONB2 Business Strategy
IBUSB2 International Business
MGMTA2 Management
MGMTB2 Human Resource Management
MARKB2 Marketing

Psychology Minor
Year 2/3/4/5 PSCY1001 - Psychology 1A
PSCY1011 - Psychology 1B
PSYC2061 - Social and Developmental Psychology
PSYC2071 - Perception and Cognition
PSYC2081 - Learning and Physiological Psychology
PSYC2101 - Assessment, Personality and Psychopathology

Mechatronics Minor
Year 3/4/5 MTRN3020 Modelling and Control of Mechatronic Systems
MTRN3108 Robot Design
MTRN4230 Robotics
MTRN4019 Advanced Autonomous Systems

Photovoltaics Minor
Year 2 SOLA3540 Applied Photovoltaics
Year 3/4/5 Select three from the following of:
SOLA2020 Photovoltaic Techn & Manufacturing
SOLA3507 Solar Cells & Systems
SOLA5509 Photovoltaics Materials Processing Technology
SOLA5508 High Efficiency Silicon Solar Cells
OR
SOLA4012 Grid-Connected Photovoltaics
SOLA5054 PV Stand-Alone Sys. Des. & Inst
SOLA5057 Managing Energy Efficiency
SOLA5053 Wind Energy
SOLA3010 Low Energy Building and Photovoltaics

Computing Minor
Year 2 Select two from the following courses:
COMP2911: Engineering Design in Computing
COMP3231: Operating Systems
COMP3211: Computer Architecture
COMP4601: Configurable Systems and Logic Design
Year 3/4/5 Select two from many breadth and depth courses available

Mathematics Minor
Year 2 MATH2620 Higher Complex Analysis
MATH2130 Higher Mathematical Methods for Differential Equations
Year 3 MATH2901 Higher Theory of Statistics
Year 4/5 MATH3XXX (2 courses)

Physics Minor
Year 2 PHYS2040 Quantum Physics
PHYS2030 Laboratory
PHYS2060 Thermal Physics
Year 3 PHYS210 Quantum Mechanics
PHYS3080 Solid State Physics
PHYS3060 Advanced Optics
AND One other course

The above plan is typical, but the actual timing of the minor courses may vary depending on the choice of minor.

The degree can be completed in 4.5 years if students do two summer sessions.

In May 2011, The University of New South Wales became the first Australian institution to be awarded the maximum five stars in the new QS Stars™ ratings system, a comprehensive evaluation based on 30 indicators conducted by QS, the higher education information provider behind the QS World University Rankings. UNSW Electrical Engineering is listed as 34th in the world according to these rankings.