# **COURSE DETAIL**

#### **COMPOSITES AND FUNCTIONAL MATERIALS**

# **Country**

Australia

#### **Host Institution**

University of New South Wales

# Program(s)

University of New South Wales

#### **UCEAP Course Level**

**Upper Division** 

# **UCEAP Subject Area(s)**

Materials Science Engineering

### **UCEAP Course Number**

127

#### **UCEAP Course Suffix**

#### **UCEAP Official Title**

COMPOSITES AND FUNCTIONAL MATERIALS

# **UCEAP Transcript Title**

**COMPOSITS&MATERIALS** 

# **UCEAP Quarter Units**

6.00

#### **UCEAP Semester Units**

4.00

### **Course Description**

Topics covered in this course include polymer matrix, metal matrix, and ceramic matrix composites; nanocomposites; mechanical behaviour of composites; physico-chemical characterisation; fabrication techniques; design with composites; applications; fundamentals of semiconductor physics; material processes used in the fabrication of electronic devices such as single crystal growth, implantation, lithography, etching, and thin film growth; sources of failure and methods of fault diagnosis in devices; and application of dielectric materials in semiconductor devices.

### Language(s) of Instruction

English

### **Host Institution Course Number**

**MATS4005** 

#### **Host Institution Course Title**

COMPOSITES AND FUNCTIONAL MATERIALS

# **Host Institution Campus**

sydney

# **Host Institution Faculty**

**Host Institution Degree** 

# **Host Institution Department**

Materials Science and Engineering

**Print**