# GRADUATE CERTIFICATE IN SECONDARY STEM EDUCATION (1882)

Approved Abbreviation: GradCertSecSTEMEd
Western Sydney University Program Code: 1882

This program applies to students who commenced in Autumn 2020 or later

The Graduate Certificate in Secondary STEM Education will equip secondary teachers with the skills and knowledge to design and implement integrated STEM programs. Teachers will develop knowledge and advanced pedagogical principles in science, technology, engineering, and mathematics to be applied in specialised secondary STEM education contexts. Teachers will also develop skills in leading interdisciplinary teams to promote and deliver STEM programs in secondary schools, and a strong understanding of the importance of research evidence to inform their teaching in STEM. The program is suitable for secondary science, mathematics, or design and technology teachers

#### Study Mode

One year part-time.

## **Program Advice**

Professor Tonia Gray (https://directory.westernsydney.edu.au/search/name/Tonia%20Gray/)

Prospective students should visit the following websites for general enquiries about this program.

Enquire about this program (https://enquiry.westernsydney.edu.au/courseenquiry/)| Local Admission (https://www.westernsydney.edu.au/future/) | International Admission (https://www.westernsydney.edu.au/international/home/apply/admissions/) |

### Location

Campus	Attendance	Mode	Advice
Online	Part Time	Online	See above

## Admission

Applicants must have successfully completed an undergraduate degree (of 3 or 4 years), or higher, in teaching/education that leads to a professional teaching qualification.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC). Use the links below to apply via UAC or Western Sydney University. Applications made directly to Western Sydney do not have an application fee.

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

http://www.uac.edu.au/ https://westernsydney.uac.edu.au/ws/ Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

# **Special Requirements Prerequisites**

Students must satisfactorily complete the Working with Children Check Student Declaration upon entry.

# **Program Structure**

Qualification for this award requires the successful completion of 40 credit points as per the recommended sequence below.

# **Recommended Sequence**

Note: The program offers two entry points per year. The program learning outcomes can be met regardless of the order of the subject sequence as there are no prerequisites for these subjects.

## Start-year

Course	Title	Credit Points
Autumn session		
TEAC 7152	Applied Robotics and Programming in Secondary STEM Education	10
TEAC 7120	STEM Pedagogies in Practice	10
	Credit Points	20
Spring session		
TEAC 7151	Applied Mathematics and Science in Secondary STEM Education	10
TEAC 7116	Researching STEM Education for Future Leadership	10
	Credit Points	20
	Total Credit Points	40

#### Mid-year

Course	Title	Credit Points
Spring session		
TEAC 7151	Applied Mathematics and Science in Secondary STEM Education	10
TEAC 7116	Researching STEM Education for Future Leadership	10
	Credit Points	20
Autumn session		
TEAC 7152	Applied Robotics and Programming in Secondary STEM Education	10
TEAC 7120	STEM Pedagogies in Practice	10
	Credit Points	20
	Total Credit Points	40

## **Short Course Recommended Sequence**

Course	Title	Credit Points
Spring session		
TEAC 7151	Applied Mathematics and Science in Secondary STEM Education	10
TEAC 7116	Researching STEM Education for Future Leadership	10
	Credit Points	20

#### Quarter 4 session

TEAC 7152	Applied Robotics and Programming in Secondary STEM Education	10
TEAC 7120	STEM Pedagogies in Practice	10
	Credit Points	20
	Total Credit Points	40