



# AU – HWU

## STUDY ABROAD PROGRAM



# 2 + 2 PROGRAM

Double Degree, Joint program

@Heriot - Watt University

For more information

 [www.studyabroad.au.edu](http://www.studyabroad.au.edu)

 [studyabroad@au.edu](mailto:studyabroad@au.edu)

# Electrical and Electronics Engineering

## Assumption University

<b>FIRST YEAR</b> First Semester		<b>FIRST YEAR</b> Second Semester	
BG 0008	General Chemistry Laboratory	BG 1002	English II
BG 1001	English I	BG 1205	Calculus II
BG 1108	General Chemistry	BG 1213	Physics II
BG 1204	Calculus I	BG 1214	Physics Laboratory II
BG 1211	Physics I	BG 1221	Computer Programming
BG 1212	Physics Laboratory I	ME 1113	Engineering Drawing
IE 1110	Engineering Materials	ME 1114	Engineering Workshop
MGT 1101	Introduction to Business	GE 2202	Ethics
<b>SECOND YEAR</b> First Semester		<b>SECOND YEAR</b> Second Semester	
BG 2000	English III	BG 2001	English IV
BG 2207	Engineering Mathematics	ME2211	Engineering Mechanics I
BG 2208	Discrete Mathematics	CE 2704	Digital Logic Design
EE 2201	Electric Circuits	CE 2705	Digital Logic Design Laboratory
EE 2202	Electric Circuits Laboratory	TE3000	Principal of Communications
EE 2605	Engineering Electronics	EE 4705	Power Electronics
EE 2606	Engineering Electronics Laboratory	EE 4706	Power Electronics Laboratory
ME 2211	Engineering Mechanics I	GE 2101	World Civilization
EE 3705	Microprocessors and Microcontrollers	EE 3606	Electrical Instruments and Measurements
		MCE4102	Introduction to industrial Automation

## Heriot- Watt University

<b>Third YEAR</b> First Semester		<b>Thirst YEAR</b> Second Semester	
B39AX	Engineering mathematics and Statistics	B39MA	Electromagnetism
B39ES	Electrical Energy Systems	B39SB	Time Frequency and Signal Analysis (Free Elective)
B39SA	Signals and Systems	B39VS	System Project
B39SE	Semiconductor Electronics		
<b>Final YEAR</b> First Semester		<b>Final YEAR</b> Second Semester	
B30UB	4 <sup>TH</sup> Year Project 1	B30UC	4 <sup>TH</sup> Year Project 2
B30ES	Industrial Power Systems	B30EK	Sustainable Energy and Power System
B31GA	Electrical Power Systems	B30UF	4 <sup>TH</sup> Year Individual Project
<b>B30EJ</b>	<b>Linear Control</b>	<b>B31SE</b>	<b>Image Processing (Major Elective)</b>
<b>B31DD</b>	<b>Embedded System (Major Elective)</b>	<b>B31XO</b>	<b>Scalable Inference &amp; Deep Learning I (Major Elective)</b>

# TELECOMMUNICATION AND ELECTRONICS ENGINEERING

## Assumption University

### FIRST YEAR First Semester

BG 0008	General Chemistry Laboratory
BG 1001	English I
BG 1108	General Chemistry
BG 1204	Calculus I
BG 1211	Physics I
BG 1212	Physics Laboratory I
IE 1110	Engineering Materials
MGT1101	Introduction to Business

### FIRST YEAR Second Semester

BG 1002	English II
BG 1205	Calculus II
BG 1213	Physics II
BG 1214	Physics Laboratory II
BG 1221	Computer Programming
ME 1113	Engineering Drawing
ME 1114	Engineering Workshop
EE2401	Electromechanical Energy Conversion

### SECOND YEAR First Semester

BG 2000	English III
BG 2207	Engineering Mathematics
BG 2208	Discrete Mathematics
EE 2201	Electric Circuits
EE 2202	Electric Circuits Laboratory
ME 2211	Engineering Mechanics I
EE3606	Electrical Instruments and Measurements
Ge2202	Ethics
TE3102	Communication Networks and Transmission Lines
TE 3301	Radio Wave Propagation

### SECOND YEAR Second Semester

BG 2001	English IV
CE 2704	Digital Logic Design
CE 2705	Digital Logic Design Laboratory
GE 2101	World Civilization
CE 4207	System and Network Programing
CE 4224	Telecommunication Networks Laboratory
CE4228	Data Communication and Networking
TE 4111	Antenna Engineering
TE 4112	Optical Communication
EE2401	Electromechanical Energy Conversion
EE2401	Electromechanical Energy Conversion Laboratory

## Heriot-Watt University

### Third YEAR First Semester

B39AX	Engineering mathematics and Statistics
B39ES	Electrical Energy Systems
B39SA	Signals and Systems
B39SE	Semiconductor Electronics

### Thirst YEAR Second Semester

B39MA	Electromagnetism
B39SB	Time Frequency and Signal Analysis (Free Elective)
B39VS	System Project (Free Elective)

### Final YEAR First Semester

B30UB	4 <sup>TH</sup> Year Project 1
B30ES	Industrial Power Systems
B30SQ	Communication Device and System
B30EJ	Linear Control
B31DD	Embedded System
B38DF	Computer Architecture and Embedded Systems

### Final YEAR Second Semester

B30UC	4 <sup>TH</sup> Year Project 2
B30EK	Sustainable Energy and Power System
B30UF	4 <sup>TH</sup> Year Individual Project
B30EI	Advanced Analogue Electronics
B31SE	Image Processing
B31XO	Scalable Inference & Deep Learning I

## Heriot-Watt University

Topic	Details
Program Offer	<p><b><u>Assumption University</u></b>            Bachelor of Engineering in</p> <ul style="list-style-type: none"> <li>❖ Electrical and Electronics Engineering</li> <li>❖ Telecommunication and Electronics Engineering</li> </ul> <p><b><u>Heriot-Watt University</u></b></p> <ul style="list-style-type: none"> <li>❖ Bachelor of Engineering in Electrical and Electronics Engineering</li> </ul>
Place(Country, City)	Scotland, Edinburgh City
Tuition Fees	£19,400 (Approximately 860,000 Baht)/ Per year Tuition fee will be increased approx. GBP200 per year. <a href="https://www.hw.ac.uk/uk/study/undergraduate/electrical-and-electronic-engineering.htm">https://www.hw.ac.uk/uk/study/undergraduate/electrical-and-electronic-engineering.htm</a> * First semester tuition fees must pay in the name of Assumption University
Duration	2 year
Admission Period	February, September
Living Cost	£865 to £1,100 ( 34,600 – 44,000 Baht)/ months (9 months per year)
Accommodation, Health and student supports	University Accommodation: <a href="https://www.hw.ac.uk/uk/edinburgh/accommodation/undergraduate-accommodation.htm">https://www.hw.ac.uk/uk/edinburgh/accommodation/undergraduate-accommodation.htm</a> Health, Wellbeing and student supports: <a href="https://www.hw.ac.uk/uk/students/edinburgh-campus.htm">https://www.hw.ac.uk/uk/students/edinburgh-campus.htm</a> Living in the UK (Banking & Budgeting, Working in the UK): <a href="https://www.hw.ac.uk/uk/students/international/uk.htm">https://www.hw.ac.uk/uk/students/international/uk.htm</a>
IELTS Score	6.0 (Academic) or above with a minimum of 5.5 in each component of writing, speaking, listening and reading.
Scholarship	10%
Accumulative GPA	3.00

**Students allowed to work on or off campus** - 20 hours/ week during term time and 40 hours/ week during holiday break. <https://www.hw.ac.uk/uk/students/careers/uk/jobs/working-in-the-uk.htm>

**Internship opportunities for foreign students** - <https://www.hw.ac.uk/uk/students/careers/uk/jobs/internships-work-experience.htm>

**Job opportunities for foreign students after graduation, more info is here-** <https://www.hw.ac.uk/uk/students/careers/uk/jobs/graduate-jobs.htm>

**From June 2021, students who graduated from the UK can apply for a post-study visa for 2 years.** <https://www.gov.uk/government/news/uk-announces-2-year-post-study-work-visa-for-international-students>

## **Application period**

- ❖ At least 4 months before the semester begins.
- ❖ Deposit of 10,000 baht for the application fee (it is refundable only in the case of visa or university rejection.)