



INTERNATIONAL JOINT TRAINING PROGRAM

BACHELOR'S DEGREE IN MECHATRONICS ENGINEERING TECHNOLOGY

- 2+2 PATHWAY

TONGMYONG UNIVERSITY

OVERVIEW

- This is to provide the undergraduate joint training programs (2+2 pathway) in partnership with Tongmyong University (TU), Korea.
- Bachelor's degrees: be awarded by Tongmyong University (TU), Korea.
- Duration of the program: 4 years.
- Language instruction: English.
- Number of credits: 118 credits.

PROGRESSION PATHWAY



** Tuition fees and scholarship schemes are subject to change on an annual basis.*

LIST OF COURSES

PHASE 1 – YEAR 1 (Study in Vietnam)

Comp/Elec	Course Code	Course Name	Credits
Semester 1			10
Compulsory	MATH141601E	Calculus I	4
Compulsory	INME130125E	Introduction to Mechatronic Engineering	3
Compulsory	GCHE130603E	General Chemistry for Engineers	3
Compulsory	PHED110513E	Physical Education 1	0
Elective	EHQT 130137E	Academic English 1	*3
Elective	EHQT 230237E	Academic English 2	*3
Semester 2			18
Compulsory	MATH141701E	Calculus II	4
Compulsory	MATH130401E	Mathematical Statistics for Engineers	3
Compulsory	PHED110613E	Physical Education 2	0
Elective	EDDG240120E	Descriptive Geometry & Engineering Drawing (3+1)	4
Compulsory	PHYS 130402E	Principles of Physics 1	3
Elective	ENMA220130E	Materials Science	2
Compulsory		General Knowledge Option Course 1	2
Elective	EHQT 230337E	Academic English 3	*3
Elective	TEEN123725E	Technical English 1	*2

PHASE 1 – YEAR 2 (Study in Vietnam)

Comp/Elec	Course Code	Course Name	Credits
Semester 1			17
Elective	MATH141801E	Calculus III	4
Compulsory	PHED130715E	Physical Education 3	0
Elective	PHYS110602E	Principles of Physics -Laboratory 1	1
Elective	APEN331329E	Applied Programming in Engineering	3
Elective	THME230721E	Theoretical Mechanics	3
Elective	EEEN230129E	Electrical and Electronics Engineering	3
Elective	MATE210230E	Experiments in Materials Science	1
Compulsory		General Knowledge Option Course 2	2
Elective	TEEN233825E	Technical English 2	*3

Semester 2			19
Compulsory	AMME331529E	Applied Mathematics in Mechanical Engineering	3
Elective	STMA230521E	Strength of Materials	3
Elective	TOMT220225E	Tolerances and Measuring Technology	2
Elective	METE210321E	Mechanical Experiments	1
Elective	TMMP230220E	Theory of Machine and Machine Design	3
Elective	DITE226829E	Digital Techniques	2
Elective	FMMT330825E	Fundamentals of Machine Manufacturing Technology	3
Elective	EEEE210229E	Experiments in Electrical and Electronics Engineering	1
Elective	PAPE311429E	Practice in Applied Programming in Engineering	1
Elective	EHQT 230437E	Academic English 4	*3

PHASE 2 – YEAR 3 (Study in Korea)

Comp/Elec	Course Name (Korea)	Course Name (English)	Credits
Semester 1			18
Elective	디지털회로실험	Experiment for Digital Circuits	3
Elective	3D CAD	3D CAD	3
Elective	계측공학	Engineering of measurement	3
Elective	유한요소법설계	Finite Element Method and Design	3
Elective	제어공학	Control Systems Engineering	3
Elective	기구학	Kinematics	3
Semester 2			21
Elective	열역학	Thermodynamics	3
Elective	기계요소설계	Machine Element Design	3
Elective	C++언어	C++Programming	3
Elective	유체역학	Fluid Mechanics	3
Elective	액츄에이터공학	Actuator Engineering	3
Elective	자동화시스템	Automated System	3
Elective	마이크로프로세서응용설계	Microprocessor Application and Design	3

PHASE 2 – YEAR 4 (Study in Korea)

Comp/Elec	Course Name (Korea)	Course Name (English)	Credits
Semester 1			14
Elective	로봇응용실습	Experiment of Robot Application	3
Elective	CAE응용설계	CAE Design	3
Elective	PLC programming	PLC programming	2
Elective	일반기계융합설계(이론)	Convergence Design for General Machinery (Theory)	3
Compulsory	종합설계_Capstone Design	Capstone Design 1	3
Semester 2			8
Elective	일반화학	General Chemistry	2
Compulsory	전공연구_Capstone Design	Capstone Design 2	3
Compulsory	현장실습	Internship	3