

Training program of Mechatronics Engineering Technology

No	Module code	Module title	ECTS
.			
I	Core modules		
1.1	Core general training modules		
1	ICT1.001	Introduction to informatics	3
2	MAT1.001	Calculus 1	4
3	MAT1.002	Linear Algebra	4
4	PHY1.001	Fundamental Physics 1	4
5	ICT1.002	Basic programming	4
6	ICT1.003	Computer Architecture	3
7	ICT1.004	Introduction to Algorithm	3
8	MAT1.003	Calculus 2	3
9	PHY1.002	Fundamental Physics 2	4
10	PHY1.004	Practical physics	2
1.2	Core specialized modules		
1	MET2.001	Introduction to mechatronics	2
2	MET2.016	General mechanics of rigid solids	3
3	MET2.003	Electrical engineering 1	4
4	MET2.020	Analogical electronics	3
5	MET2.006	Micro-processor and micro-controller	3
6	MET2.007	Digital electronics	4
7	EER2.014	Sensors and analytical devices	4
8	MET2.008	Math for the mechanical engineers	3
9	MET2.010	Materials 1	3
10	EER2.013	Product design 1	3
11	MET2.018	Manufacturing 1	4
12	MET2.015	Hydraulics and Pneumatics	3
13	MET3.005	Signal processing	3
14	MET3.007	Automatic control 1	3
15	MET3.020	Embedded system	4
16	EER3.030	Innovation	3

No	Module code	Module title	ECTS
.			
17	MET3.017	Robotics	4
18	MET3.018	PLC programing	4
19	MET3.019	Management of manufacturing	3
20	MET3.024	Internship	15
1.3	Core supplementary modules		
1	FR2.001	French 2.1	4
2	FR2.002	French 2.2	4
3	MET2.019	Introduction to probability	3
4	MAT2.001	Numerical methods	3
II	Optional module group 1		
1	ICT2.003	Object oriented programing	4
2	MET3.002	Non-metallic materials	3
3	MET3.021	Manufacturing 2	4
4	MET3.004	Industrialization	3
5	EER3.006	Product design 2	3
6	MET3.009	Automatic control 2	3
7	ATE3.004	Power electronics and applications	3
8	MET3.012	Electrical engineering 2	3
9	MET3.013	Materials 2	3
10	MET3.022	Integration of Mechatronics and the Internet of Things in Smart Building	3
11	EER3.023	Energy efficiency	3
12	ICT2.019	Image processing	3
13	MET3.023	Autonomous Robot	3
14	ATE3.012	Mechatronics system on automobiles	4
15	ICT2.017	Machine Learning and Data Mining 1	4
16	PHI1.001	Philosophy	3
III	Optional module group 2		
IV	Conditional modules (for Vietnamese students only)		
1	QP1.001	National defense and security education	0