

Training program of Automotive Engineering

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	ICT1.004	Introduction to Algorithm	3
7	MAT1.003	Calculus 2	3
8	PHY1.002	Fundamental Physics 2	4
9	PHY1.004	Practical physics	2
1.2	Core specialized modules		
1	ATE2.001	Introduction to automotive engineering	2
2	MET2.016	General mechanics of rigid solids	3
3	ATE2.003	Analog and digital electronics	3
4	ATE2.004	Automobile structure	4
5	ATE2.005	Principles of internal combustion engine	3
6	ATE2.006	Electrical engineering	3

7	ATE2.007	Mechanics of materials	3
8	ATE2.008	Materials	3
9	ATE2.009	Machine design	3
10	ATE2.010	Technical drawing	3
11	ATE2.011	Automotive theory	4
12	ATE2.012	Automobile design	3
13	MET2.008	Mathematics for the mechanical engineers	3
14	EER2.003	Fluid mechanics	3
15	EER2.014	Sensors and analytical devices	4
16	EER3.030	Innovation	3
17	ATE3.001	Summer internship	2
18	ATE3.002	Automobile manufacturing	3
19	ATE3.006	Automobile diagnostics, maintenance and repair F1	3
20	ATE3.020	Automotive electrical systems	3
21	ATE3.009	Automobile simulation	2
22	ATE3.012	Mechatronics system on automobiles	4
23	ATE3.024	Internship	14
1.3	Core supplementary modules		
1	MAT2.001	Numerical methods	3
2	MET2.019	Introduction to probability	3
3	FR2.001	France 2.1	4

4	FR2.002	France 2.2	4
II	Optional module group 1		
1	ICT2.010	Image processing	3
2	MET2.006	Micro-processor and micro-controller	3
3	EER2.006	Conversion of energy	3
4	ATE3.003	Environmental engineering	2
5	ATE3.004	Power electronics and applications	3
6	EER3.001	Control engineering	3
7	ATE3.008	Automotive research and development	2
8	ATE3.013	Automobile experiment	3
9	ATE3.014	Automobile diagnostics, maintenance and repair F2	3
10	ATE3.015	Connected autonomous vehicles	3
11	ATE3.016	Hybrid and electric vehicles	3
12	ATE3.018	Embedded system for automobile	3
13	ATE3.019	Management in Automotive Manufacturing	3
14	ATE3.025	Chassis-Frame Technology	2
15	ATE3.021	CAD/CAE in Vehicle Research and Development	3
16	ATE3.022	Intelligent Vehicles	2
17	ATE3.023	Basic principles of rotating electrical machines	3
18	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