

Expertise 1: Major in Machine Manufacturing Technology

No	Code	Course	Credits	Semester
1	MATH130101	Advanced Mathematics A1	3	1
2	ENGL130137	English 1	3	1
3	GCHE130103	General Chemistry A1	3	1
4	INME130125	Introduction to Mechanical Engineering	3	1
5	VBPR131085	Visual Basic Programming	3	1
6	MATH130201	Advanced Mathematics A2	3	1
7	GELA220405	General Law	2	1
8	PHED110513	Physical Education 1	1	1
9	MATH130301	Advanced Mathematics A3	3	2
10	MATH130401	Applied Probability & Statistics	3	2
11	LLCT150105	Basic principles of Marxism & Leninism	5	2
12	ENGL230237	English 2	3	2
13	PHYS130102	Fundamental Physics A1	3	2
14	PHED110613	Physical Education 2	1	2
	<i>Choose three from the following elective General knowledge courses</i>		6	2
	GEEC220105	General Economics	2	
	INMA220305	Introduction of Management	2	
	INLO220405	Introduction to Logics	2	
	ULTE121105	Learning Methods in University	2	
	SYTH220505	Systematic Thinking	2	
	PLSK320605	Planning Skills	2	
	IVNC320905	Introduction to Vietnamese Culture	2	
	INSO321005	Introduction to Sociology	2	
15	LLCT120314	Ho Chi Minh's Ideology	2	3
16	ENGL330337	English 3	3	3
17	PHYS120202	Fundamental Physics A2	2	3
18	PHYS110302	Experiment of Physics	1	3
19	THME230721	Theory of Mechanics	3	3
20	EDDG230120	Descriptive Geometry and Technical Drawing	3	3
21	ENMA220126	Materials Science	2	3
22	MHAP120227	Mechanical Works Practice	2	3
23	PHED130715	Physical Education 3 (Elective)	3	3
24	LLCT230214	Vietnamese Communist Party's revolutionary policies	3	4
25	TOMT220225	Tolerances and Measuring Techniques	2	4
26	TMMP230220	Theory of Machine and Machine design	3	4
27	STMA230521	Strength of Materials	3	4
28	EXMM210325	Experiment of Mechanical Measurement	1	4

No	Code	Course	Credits	Semester
29	MATE211126	Experiment on Materials Science	1	4
30	PEPR220426	Welding Practice	2	4
31	MATH131501	Applied Mathematics in Engineering	3	4
	<i>Choose one from the following elective fundamental courses</i>		3	4
	CADM230320	Computer-Aided Design	3	
	EEEN230129	Electrical and Electronic Engineering	3	
32	METE330126	Metal Technology	3	5
33	METE210321	Experiment of Mechanics	1	5
34	PMMD310423	Project on Theory of machine and machine design	1	5
35	FMMT330825	Fundamentals of Machine Manufacturing Technology	3	5
36	BATP230227	Basic Turning Practice	3	5
37	BAMP220327	Basic Milling Practice	2	5
	<i>Choose three from the following elective fundamental courses</i>		6	5
	ENVI320921	Engineering Vibrations	2	
	FLUI220132	Fluid Mechanics	2	
	THER222932	Thermal Engineering	2	
	OPTE322925	Optimization in Engineering	2	
38	MTNC340925	Machines and Numerical Control Systems	4	6
39	MMAT431525	Machine Manufacturing Technology	3	6
40	PNHY330529	Pneumatic –Hydraulic Technology	3	6
41	EPHT310629	Experiments of Pneumatic –Hydraulic Technology	1	6
42	ENME320124	English for Mechanical Engineering	2	6
43	TPRA340527	Advanced Turning Practice	4	6
44	EEEE321925	Electrical and Electronic Equipment in Industrial machines	2	6
45	ELDR312025	Experiments on Electrical and Electronic Equipment in Industrial machines	1	6
46	CCCT431725	CAD/CAM-CNC Technology	3	7
47	PCCC421825	Practice of CAD/CAM-CNC Technology	2	7
48	PMMT411625	Project on Machine Manufacturing Technology	1	7
49	MPRA320927	Advanced Mechanical Practice	2	7
50	AUMP323525	Automation of Manufacturing Process	2	7
51	EMPA313625	Experiments on Automation of Manufacturing Process	1	7
	<i>Choose three from the following elective Specialized Courses</i>		6	7
	MQMA321125	Manufacturing and Quality Management	2	

No	Code	Course	Credits	Semester
	IMAS320525	Maintenance in Industry	2	
	EIMA310625	Experiments on Maintenance in Industry	1	
	MOLD431224	Mold Design and Fabrication	3	
	DEIP331225	Industrial Product Design	3	
	ERMA321025	Energy and Energy Management	2	
	NTMP320725	Non-traditional Manufacturing Methods	2	
	PSIE320425	Workplace Safety and Industrial Environment	2	
	INRO321129	Industrial Robots	2	
	NMME322725	Numerical Calculation in Mechanical Engineering	2	
52	FAIN423025	Internship	2	8
53	GRAT403125	Capstone project	10	8
		Graduation Examination Courses		
	STOG443225	- Special Graduation Subject 1	4	8
	STOG433325	- Special Graduation Subject 2	3	8
	STOG433425	- Special Graduation Subject 3	3	8

Expertise 2: Major in Machine Design

No	Code	Course	Credits	Semester
1	MATH130101	Advanced Mathematics A1	3	1
2	ENGL130137	English 1	3	1
3	GCHE130103	General Chemistry A1	3	1
4	INME130125	Introduction to Mechanical Engineering	3	1
5	VBPR131085	Visual Basic Programming	3	1
6	MATH130201	Advanced Mathematics A2	3	1
7	GELA220405	General Law	2	1
8	PHED110513	Physical Education 1	1	1
9	MATH130301	Advanced Mathematics A3	3	2
10	MATH130401	Applied Probability & Statistics	3	2
11	LLCT150105	Basic principles of Marxism & Leninism	5	2
12	ENGL230237	English 2	3	2
13	PHYS130102	Fundamental Physics A1	3	2
14	PHED110613	Physical Education 2	1	2
	Choose three from the following elective General knowledge courses		6	2
	GEEC220105	General Economics	2	
	INMA220305	Introduction of Management	2	
	INLO220405	Introduction to Logics	2	
	ULTE121105	Learning Methods in University	2	
	SYTH220505	Systematic Thinking	2	
	PLSK320605	Planning Skills	2	
	IVNC320905	Introduction to Vietnamese Culture	2	
	INSO321005	Introduction to Sociology	2	
15	LLCT120314	Ho Chi Minh's Ideology	2	3
16	ENGL330337	English 3	3	3
17	PHYS120202	Fundamental Physics A2	2	3
18	PHYS110302	Experiment of Physics	1	3
19	THME230721	Theory of Mechanics	3	3
20	EDDG230120	Descriptive Geometry and Technical Drawing	3	3
21	ENMA220126	Materials Science	2	3
22	MHAP120227	Mechanical Works Practice	2	3
23	PHED130715	Physical Education 3 (Elective)	3	3
24	LLCT230214	Vietnamese Communist Party's revolutionary	3	4

No	Code	Course	Credits	Semester
		policies		
25	TOMT220225	Tolerances and Measuring Techniques	2	4
26	TMMP230220	Theory of Machine and Machine design	3	4
27	STMA230521	Strength of Materials	3	4
28	EXMM210325	Experiment of Mechanical Measurement	1	4
29	MATE211126	Experiment on Materials Science	1	4
30	PEPR220426	Welding Practice	2	4
31	MATH131501	Applied Mathematics in Engineering	3	4
	<i>Choose one from the following elective fundamental courses</i>		3	4
	CADM230320	Computer-Aided Design	3	
	EEEN230129	Electrical and Electronic Engineering	3	
32	METE330126	Metal Technology	3	5
33	METE210321	Experiment of Mechanics	1	5
34	PMMD310423	Project on Theory of machine and machine design	1	5
35	FMMT330825	Fundamentals of Machine Manufacturing Technology	3	5
36	BATP230227	Basic Turning Practice	3	5
37	BAMP220327	Basic Milling Practice	2	5
	<i>Choose three from the following elective fundamental courses</i>		6	5
	ENVI320921	Engineering Vibrations	2	
	FLUI220132	Fluid Mechanics	2	
	THER222932	Thermal Engineering	2	
	OPTE322925	Optimization in Engineering	2	
38	MTNC340925	Machines and Numerical Control Systems	4	6
39	MMAT431525	Machine Manufacturing Technology	3	6
40	PNHY330529	Pneumatic –Hydraulic Technology	3	6
41	EPHT310629	Experiments of Pneumatic –Hydraulic Technology	1	6
42	ENME320124	English for Mechanical Engineering	2	6
43	TPRA340527	Advanced Turning Practice	4	6
44	CAEM430923	CAE in Machine Design	3	6
45	CCCT431725	CAD/CAM-CNC	3	7

No	Code	Course	Credits	Semester
		Technology		
46	PCCC421825	Practice of CAD/CAM-CNC Technology	2	7
47	PMMT411625	Project on Machine Manufacturing Technology	1	7
48	MPRA320927	Advanced Mechanical Practice	2	7
49	MSSD430623	Machine system simulation design	3	7
	Choose three from the following elective Specialized Courses		6	7
	MQMA321125	Manufacturing and Quality Management	2	
	IMAS320525	Maintenance in Industry	2	
	EIMA310625	Experiments on Maintenance in Industry	1	
	MOLD431224	Mold Design and Fabrication	3	
	DEIP331225	Industrial Product Design	3	
	NTMP320725	Non-traditional Manufacturing Methods	2	
	PSIE320425	Workplace Safety and Industrial Environment	2	
	INRO321129	Industrial Robots	2	
	FLCD420523	Fundamentals of Lifting machine and Construction machine Design	2	
	MEDI420823	Mechanical Design	2	
	FDFP320720	Fundamentals of Designing Food Processing Machines	2	
50	FAIN423025	Internship	2	8
51	GRAT403125	Capstone project	10	8
		Graduation Examination Courses		
	STOG443225	- Special Graduation Subject 1	4	8
	STOG433325	- Special Graduation Subject 2	3	8
	STOG433425	- Special Graduation Subject 3	3	8