

The third last number in the course code indicates the study year in which the course is typically taken. Numbers after the course name: credits (lecture hours-lab hours-self study hours per week)

Please remember that there is no guarantee that all courses are organized every semester and the course offering may change without prior notice. Please be prepared to make some changes to your course selections at the beginning of the semester.

Mechanical Engineering	
First Semester (Aug-Dec)	Second Semester (Jan-May)
01200101 Innovative Thinking 1(1-0-2)	01204111 Computers and Programming 3(2-3-6)
01208111 Engineering Drawing 3(2-3-6)	01403114 Laboratory in Fundamental of General Chemistry 1(0-3-2)
01417167 Engineering Mathematics I 3(3-0-6)	01403117 Fundamental of General Chemistry 3(3-0-6)
01420111 General Physics I 3(3-0-6)	01417168 Engineering Mathematics II 3(3-0-6)
01420113 Laboratory in Physics I 1(0-3-2)	01420112 General Physics II 3(3-0-6)
01999021 Thai Language for Communication 3(3-0-6)	01420114 Laboratory in Physics II 1(0-3-2)
01205201 Introduction to Electrical Engineering 3(3-0-6)	01205202 Electrical Engineering Laboratory I 1(0-3-2)
01208211 Engineering Design and Modeling 3(2-3-6)	01208222 Engineering Mechanics II 3(3-0-6)
01208221 Engineering Mechanics I 3(3-0-6)	01208241 Thermodynamics I 3(3-0-6)
01213211 Materials Science for Engineers 3(3-0-6)	01208242 Fluid Mechanics 3(3-0-6)
01417267 Engineering Mathematics III 3(3-0-6)	01208261 Mechanics of Solids 3(3-0-6)
01206311 Manufacturing Process I 3(3-0-6)	01208271 Computer Methods for Mechanical Engineering 3(2-3-6)
01208321 Mechanics of Machinery 3(3-0-6)	01208281 Workshop Practice 1(0-2-1)
01208322 Mechanical Vibrations 3(3-0-6)	01208331 Internal Combustion Engines 3(3-0-6)
01208332 Automotive Technology 3(3-0-6)	01208342 Power Plant Engineering 3(3-0-6)
01208341 Thermodynamics II 3(3-0-6)	01208352 Refrigeration I 3(3-0-6)
01208351 Heat Transfer 3(3-0-6)	01208361 Machine Design I 3(3-0-6)
01208481 Mechanical Engineering Laboratory II 1(0-3-2)	01208371 Automatic Control 3(3-0-6)
01208495 Mechanical Engineering Project Preparation 1(0-3-2)	01208381 Mechanical Engineering Laboratory I 1(0-3-2)
	01208499 Mechanical Engineering Project 2(0-6-3)

Electrical-Mechanical Manufacturing Engineering

First Semester (Aug-Dec)

01200101 Innovative Thinking 1(1-0-2)
 01208111 Engineering Drawing 3(2-3-6)
 01417167 Engineering Mathematics I 3(3-0-6)
 01420111 General Physics I 3(3-0-6)
 01420113 Laboratory inPhysics I 1(0-3-2)
 01999021 Thai Language for Communication 3(3-0-6)
 01205211 Electric Circuit Analysis I 3(3-0-6)
 01208221 Engineering Mechanics I 3(3-0-6)
 01211211 Introduction to CAD/CAM 3(2-3-6)
 01211231 Conventional and Computer-Controlled Machines 3(3-0-6)
 01213211 Materials Science for Engineers 3(3-0-6)
 01417267 Engineering Mathematics III 3(3-0-6)
 01205305 Digital Circuits and Microcontrollers 3(3-0-6)
 01205331 Electronic Circuits and Systems II 3(3-0-6)
 01205332 Electronic Laboratory 1(0-3-2)
 01205352 Electromechanical Energy Conversion Laboratory I 1(0-3-2)
 01206311 Manufacturing Processes I 3(3-0-6)
 01208341 Thermodynamics II 3(3-0-6)
 01211321 Kinematics and Dynamics of Robots 3(3-0-6)
 01208351 Heat Transfer 3(3-0-6)

01211422 Vibration and Shock of Production Systems 3(3-0-6)
 01211461 Power System for Industries 3(3-0-6)
 01211495 Electrical-Mechanical Manufacturing Engineering Projects Preparation 1(0-3-2)

Second Semester (Jan-May)

01204111 Computers and Programming 3(2-3-6)
 01403114 Laboratory in Fundamental of General Chemistry 1(0-3-2)
 01403117 Fundamental of General Chemistry 3(3-0-6)
 01417168 Engineering Mathematics II 3(3-0-6)
 01420112 General Physics II 3(3-0-6)
 01420114 Laboratory inPhysics II 1(0-3-2)
 01205213 Electric Circuit Laboratory 1(0-3-2)
 01205231 Electronic Circuits and Systems I 3(3-0-6)
 01205251 Electromechanical Energy Conversion I 3(3-0-6)
 01208222 Engineering Mechanics II 3(3-0-6)
 01208241 Thermodynamics I 3(3-0-6)
 01208242 Fluid Mechanics 3(3-0-6)
 01208261 Mechanics of Solids 3(3-0-6)
 01208281 Workshop Practice 1(0-3-2)
 01205306 Digital Circuits and Microcontrollers Laboratory 1(0-3-2)
 01208331 Internal Combustion Engines 3(3-0-6)
 01208352 Refrigeration I 3(3-0-6)
 01208371 Automatic Control 3(3-0-6)
 01208381 Mechanical Engineering Laboratory I 1(0-3-2)
 01211332 Production Machinery Components Design 3(3-0-6)

01211499 Electrical-Mechanical Manufacturing Engineering Project 2(0-6-3)

Software and Knowledge Engineering

First Semester (Aug-Dec)

Second Semester (Jan-May)

01200101 Innovative Thinking 1(1-0-2)
 01219111 Object-Oriented Programming I 3(2-3-6)
 01219112 Introduction to Information Technology 3(3-0-6)
 01417167 Engineering Mathematics I 3(3-0-6)
 01420111 General Physics I 3(3-0-6)
 01420113 Laboratory in Physics I 1(0-3-2)
 01999021 Thai Language for Communication 3(3-0-6)
 01204211 Discrete Mathematics 3(3-0-6)
 01204212 Abstract Data Type and Problem Solving 3(3-0-6)

01219211 Software Development Training Camp 1(0-3-2)
 01219212 Abstract Data Types Laboratory 1(0-3-2)

01219213 Communication Skills for Software and Knowledge Engineers 3(3-0-6)
 01219214 Probability and Statistics for Software and Knowledge Engineers 3(3-0-6)
 01219221 Computer Organization and Architecture 3(3-0-6)

01219271 Knowledge Engineering and Knowledge Management 3(3-0-6)

01219321 Data Communication and Computers Networks Programming 3(3-0-6)
 01219347 Workgroup Software Development Process 3(3-0-6)

01219348 Workgroup Software Development Process Laboratory 1(0-3-2)
 01219363 Knowledge Representation 3(3-0-6)
 01219391 Group Dynamics and Psychology 3(2-3-6)
 01219490 Cooperative Education 9

01219113 Object-Oriented Programming II 3(2-3-6)
 01219245 Individual Software Development Process 3(3-0-6)
 01219246 Individual Software Development Process Laboratory 1(0-3-2)
 01417168 Engineering Mathematics II 3(3-0-6)
 01420112 General Physics II 3(3-0-6)
 01420114 Laboratory in Physics II 1(0-3-2)
 01204313 Algorithms Design and Analysis 3(3-0-6)
 01204351 Database Systems 3(3-0-6)
 01219215 Computer System Laboratory 1(0-3-2)

01219216 Operating Systems for Software and Knowledge Engineers 3(3-0-6)
 01219243 Software Specification and Design 3(3-0-6)

01219244 Software Specification and Design Laboratory 1(0-3-2)

01204352 Laws and Ethics in Information Technology 3(3-0-6)
 01204482 Computer-Human Interfaces 3(3-0-6)

01219412 Technical Writing for Software and Knowledge Engineers 3(3-0-6)

01219448 Software Patterns and Architecture Laboratory 1(0-3-2)
 01219449 Software Patterns and Architecture 3(3-0-6)

01219492 Software Entrepreneurship 3(3-0-6)
 01219499 Innovative Software Group Project 3(2-3-6)

Electrical Engineering

First Semester (Aug-Dec)

1200101 Innovative Thinking 1(1-0-2)
 1204111 Computers and Programming 3(2-3-6)
 1417167 Engineering Mathematics I 3(3-0-6)
 1420111 General Physics I 3(3-0-6)

 1420113 Laboratory in Physics I 1(0-3-2)
 1999021 Thai Language for Communication 3(3-0-6)
 1205211 Electric Circuit Analysis I 3(3-0-6)
 1205216 Computer Programming for Electrical Engineering 3(3-0-6)
 1205221 Telecommunication Engineering 3(3-0-6)
 1205291 Electrical Practice 1(0-3-2)
 1208201 Basic Principles of Engineering Mechanics 3(3-0-6)
 1208281 Workshop Practice 1(0-3-2)
 1417267 Engineering Mathematics III 3(3-0-6)
 1205311 Signals and Systems 3(3-0-6)
 1205312 Applied Probability for Electrical Engineering 3(3-0-6)
 1205332 Electronic Laboratory 1(0-3-2)
 1205335 Microprocessor 3(3-0-6)
 1205341 Electromagnetic Fields and Waves I 3(3-0-6)
 1205352 Electromechanical Energy Conversion Laboratory I 1(0-3-2)
 1205491 Electrical Engineering Project I 1(0-3-2)

Second Semester (Jan-May)

1208111 Engineering Drawing 3(2-3-6)

 1403114 Laboratory in Fundamental of General Chemistry 1(0-3-2)
 1403117 Fundamental of General Chemistry 3(3-0-6)

 1417168 Engineering Mathematics II 3(3-0-6)
 1420112 General Physics II 3(3-0-6)
 1420114 Laboratory in Physics II 1(0-3-2)
 1205212 Electric Circuit Analysis II 3(3-0-6)
 1205213 Electric Circuit Laboratory 1(0-3-2)
 1205217 Electrical Engineering Mathematics 3(3-0-6)
 1205231 Electronic Circuits and Systems I 3(3-0-6)
 1205232 Digital Circuits and Logic Design 3(3-0-6)
 1205251 Electromechanical Energy Conversion I 3(3-0-6)
 1205252 Introduction to Electric Power System 3(3-0-6)
 1205361 Electrical Measurements and Instruments 3(3-0-6)
 1205362 Linear Control Systems 3(3-0-6)
 1213211 Materials Science for Engineers 3(3-0-6)
 1205499 Electrical Engineering Project II 2(0-6-3)

Environmental Engineering

First Semester (Aug-Dec)

Second Semester (Jan-May)

01200101 Innovative Thinking 1(1-0-2)
 01204111 Computers and Programming 3(2-3-6)
 01417167 Engineering Mathematics I 3(3-0-6)
 01420111 General Physics I 3(3-0-6)
 01420113 Laboratory in Physics I 1(0-3-2)
 01999021 Thai Language for Communication 3(3-0-6)
 01203211 Surveying 3(2-3-6)
 01203221 Mechanics of Materials I 3(3-0-6)
 01204112 Information Technology for Engineers 1(0-2-1)
 01208221 Engineering Mechanics I 3(3-0-6)

 01210211 Chemistry of Water and Wastewater 4(3-3-8)
 01417267 Engineering Mathematics III 3(3-0-6)
 01203352 Soil Mechanics 3(3-0-6)
 01203353 Soil Mechanics Laboratory 1(0-3-2)
 01209312 Laboratory of Fluid Mechanics 1(0-3-2)

 01210311 Unit Operations and Process for Environmental Engineering II 3(3-0-6)
 01210312 Building Sanitation 3(3-0-6)
 01210313 Design of Sewerage and Pumping System 3(2-3-6)
 01210321 Air Pollution and Control 3(3-0-6)
 01210333 Computer Application and Software in Environmental Engineering 3(2-3-6)
 01208490 Co-operative Education 6

01208111 Engineering Drawing 3(2-3-6)
 01403114 Laboratory in Fundamental of General Chemistry 1(0-3-2)
 01403117 Fundamental of General Chemistry 3(3-0-6)
 01417168 Engineering Mathematics II 3(3-0-6)
 01420112 General Physics II 3(3-0-6)
 01420114 Laboratory in Physics II 1(0-3-2)
 01203212 Survey Camp 1
 01206221 Applied Probability and Statistics for Engineers 3(3-0-6)
 01209211 Fluid Mechanics 3(3-0-6)
 01210212 Microorganisms in Water and Wastewater 3(2-3-6)

 01210213 Unit Operations and Process for Environmental Engineering I 3(3-0-6)
 01210214 Applied Mathematics in Environmental Engineering 3(3-0-6)
 01213211 Materials Science for Engineers 3(3-0-6)
 01210314 Environmental Engineering Laboratory 3(1-6-5)
 01210322 Solid Waste Engineering 3(3-0-6)

 01210331 Environmental System Management 3(3-0-6)
 01210411 Water Supply Engineering Design 3(2-3-6)
 01210412 Wastewater Engineering Design 3(2-3-6)
 01210413 Design of Environmental Engineering System 3(2-3-6)

 01210421 Hazardous Waste Engineering 3(2-3-6)
 01210495 Environmental Engineering Project Preparation 1(0-3-2)
 01210499 Environmental Engineering Project 2(0-6-3)

Industrial Engineering

First Semester (Aug-Dec)

1200101 Innovative Thinking 1(1-0-2)
 1208111 Engineering Drawing 3(2-3-6)
 1417167 Engineering Mathematics I 3(3-0-6)
 1420111 General Physics I 3(3-0-6)
 1420113 Laboratory in Physics I 1(0-3-2)
 1999021 Thai Language for Communication 3(3-0-6)
 1206221 Applied Probability and Statistics for Engineers 3(3-0-6)
 1208221 Engineering Mechanics I 3(3-0-6)
 1208241 Thermodynamics I 3(3-0-6)
 1208281 Workshop Practice 1(0-3-2)
 1213211 Materials Science for Engineers 3(3-0-6)
 1417267 Engineering Mathematics III 3(3-0-6)
 1205202 Electrical Engineering Laboratory I 1(0-3-2)
 1206311 Manufacturing Processes I 3(3-0-6)
 1206321 Operations Research for Engineers I 3(3-0-6)
 1206341 Industrial Work Study 3(3-0-6)
 1206381 Industrial Engineering Laboratory 1(0-3-2)
 1208302 Introduction to Fluid Mechanics and Machinery 3(3-0-6)
 1208381 Mechanical Engineering Laboratory I 1(0-3-2)
 1206452 Industrial Cost Analysis 3(3-0-6)
 1206471 Maintenance Engineering 3(3-0-6)
 1206495 Industrial Engineering Project Preparation 1(0-3-2)

Second Semester (Jan-May)

1204111 Computers and Programming 3(2-3-6)
 1403114 Laboratory in Fundamental of General Chemistry 1(0-3-2)
 1403117 Fundamental of General Chemistry 3(3-0-6)
 1417168 Engineering Mathematics II 3(3-0-6)
 1420112 General Physics II 3(3-0-6)
 1420114 Laboratory in Physics II 1(0-3-2)
 1205201 Electrical Engineering 3(3-0-6)
 1206222 Applied Mathematics for Industrial Engineers 3(3-0-6)
 1206223 Introduction to Experimental Design for Engineers 3(3-0-6)
 1206251 Engineering Economy 3(3-0-6)
 1208222 Engineering Mechanics II 3(3-0-6)
 1206312 Industrial Study 1(0-3-2)
 1206322 Quality Control 3(3-0-6)
 1206342 Production Planning and Control 3(3-0-6)
 1206343 Industrial Plant Design 3(3-0-6)
 1206361 Computer Applications for Industrial Engineers 3(3-0-6)
 1206362 Automatic Production System 4(3-3-8)
 1206425 Operations Research for Engineers II 3(3-0-6)
 1206431 Industrial Management 3(3-0-6)
 1206472 Industrial Safety 3(3-0-6)
 1206499 Industrial Engineering Project 2(0-6-3)