

***TRAINING PROGRAM
AUTOMOTIVE ENGINEERING
UNDERGRADUATE PROGRAM***

- Name of program: Automotive engineering technology
- Level: Undergraduate
- Major: Automotive engineering technology
- Code: 7510205
- Type of education: Full-time

1. Program description

The Automotive Engineering Technology of training program trains Automotive Engineers Technology who have sufficient knowledge, skills, political qualities, ethics, professional manners and good health to be able to work effectively in fields related to Automotive Engineering Technology.

2. Program duration: 4 years

Name of program	Automotive Engineering Technology
Program code	7510205
Degree-granting institution	Nam Can Tho University
Degree	The Degree of Engineering Automotive Engineering Technology
Level	University
The number of required credits	152
Type of education	Full time
Program duration	4 years
Eligible candidates for admission	Object: High school graduates Criteria: According to the enrollment scheme of the University and the current enrollment regulations of the Ministry of Education and Training.
Grading scale	10
Total number of credits	152 credits (excluding credits for Physical Education and National Defense Education) The program demonstrates a good balance between skills and the blocks of general

	education knowledge and specialized knowledge. The program structure is rigorous, integrating various subjects and courses.
Graduation requirements	<p>Accumulate sufficient academic credits and complete the required training program with a total of 152 credits;</p> <p>Have a cumulative GPA of at least 5.00 on a 10-point .</p> <p>Meet the institutional graduation requirements for English proficiency and Information Technology skills;</p> <p>Meet the institutional graduation requirements for English proficiency and Information Technology skills;</p> <p>Possess valid certificates in National Defense and Security Education, as well as Physical Education.</p>
Job opportunities	<p>Take on technical and quality management tasks in enterprises specializing in research, design, assembly, and manufacturing of automobiles, engines, tractors, and related machinery.</p> <p>Work in vehicle registration and inspection agencies; transportation companies; construction equipment operation companies; shipyard and railway repair factories; mechanical installation enterprises. Additionally, automotive mechanical engineers can establish and operate their own specialized businesses.</p> <p>Provide consultancy, design, scientific research, and technology transfer in fields such as automotive engineering, internal combustion engines, tractors, construction machinery, and high-tech agricultural equipment at research institutes, centers, and governmental research agencies, as well as universities and colleges related to automotive mechanics, power machinery, construction mechanization, and high-tech agricultural machinery.</p>

	Participate in teaching specialized subjects related to automobiles, engines, and special-purpose construction machinery at universities, colleges, vocational schools, and technical institutions offering related programs.
Postgraduate study options	Graduates are eligible to pursue Master's and Doctoral degrees both domestically and internationally.
Reference program	Domestic training programs are offered by: Ho Chi Minh City University of Technology (HCMUT), Ho Chi Minh City University of Technology and Education (HCMUTE), and Ho Chi Minh City University of Technology (HUTECH).

3. Required total credits

Required total credits: 152 credits (excluding the Physical Education and Defense and security education courses), distributed as follows:

Knowledge	Obligatory knowledge	Elective knowledge	Total
General knowledge	39	2	41
Political theory, General State Law	13	0	13
Social Sciences and Humanities	0	2	2
Language	12	0	12
Mathematics	14	0	14
Physical Education	3 (*)		
Defense and security education courses	8 (*)		
Professional knowledge	93	8	101
Fundamental knowledge	37	2	39
Specialized knowledge	56	6	62
Graduation internship and Graduation thesis	10	0	10
Graduation internship	4	0	4
Graduation thesis	6	0	6
Total	142	10	152

4. Program structure

4.1. General knowledge

A. Political theory

No	Course name	Credits	Theor y	Practice
1	Marxist-Leninist Philosophy	3	3	0
2	Scientific Socialism	2	2	0
3	Ho Chi Minh Ideology	2	2	0
4	History of the Communist Party of Vietnam	2	2	0
5	Political Economics	2	2	0
Total		11	11	0

B. Social Sciences

No	Course name	Credits	Theor y	Practice
	Học phần bắt buộc (Obligatory courses)			
1	General State Law	2	2	0
Total		2	2	0

C. Mathematics - Information Technology - Natural Sciences

No	Course name	Credits	Theor y	Practice
1	Basic Informatics	3	2	1
2	Advanced Mathematics A1	3	3	0
3	Advanced Mathematics A2	2	2	0
4	Probability Theory and Statistics	3	3	0
5	General Physics - General Physics and Experimental Physics - The Experimental Physics	3	2	1
Total		14	12	2

D. Language:

No.	Course name	Credits	Theor y	Practice
1	Basic english 1	3	3	0
2	Basic english 2	3	3	0
3	Basic english 3	3	3	0
4	Basic english 4	3	3	0
Total		12	12	0

E. Physical education: 3 TC

F. Defense and Security education: 8 TC

4.2 Professional knowledge

No	Course name	Credits
1	Scientific Research Methodology	2
2	Theoretical Mechanics	3
3	Strength of Materials	3
4	Technical Drawing	3
5	Tolerance - Measurement Techniques	2
6	Mechanical Materials	2
7	Principles of Machines	2

No	Course name	Credits
8	Machine Components – Project	2
9	Fluid Mechanics	2
10	Electrical Engineering - Electronics - Electrical Engineering and Electronics	3
11	Thermal Engineering	2
12	Applied Microprocessing	2
13	Occupational Safety	1
14	Brand Management	3
15	Introduction to Automotive Engineering	3
16	Entrepreneurship and Innovation	2

4.1 Specialized knowledge

No	Course name	Credits
	Obligatory courses	
1	Specialized English for Automotive Engineering	3
2	Principles of Internal Combustion Engines	3
3	Automotive Electronics	3
4	Automotive Theory	3
5	Design and Computation of Automobiles	3
6	Electric Engine System and Engine Control	3
7	Electric and Automatic Control Systems in Automobiles	3
8	Automotive Inspection Techniques	1
9	Specialized Automotive Engineering	2
10	Technical Diagnosis and Maintenance - Car Repair	2
11	Automobile Production and Assembly Technology	3
12	Project management for engineers	3
13	Automobile Painting Repair Techniques	1
14	Mechanical Workshop Practice (Milling, Welding, Machining...)	3
15	Internal Combustion Engine – Practicum	4
16	Automotive Practicum	4
17	Electric System and Automatic Control on Automobiles – Practicum	4
18	Automotive Electrical and Automatic Control System – Practicum	3
19	Automobile Inspection Techniques – Practicum	1
20	Automobile Painting Repair Techniques – Practicum	3
	Elective courses	
1	Advanced Automotive Fuels and Engine Applications	2
2	Lubricating oil-based fuel	2
3	Air conditioning systems and amenities in automobiles	2
4	Automotive and Engine Testing	2
5	Automotive air conditioning system – internship	2
6	Automatic transmission - practical training	2
7	Practical Training and Testing of Diesel Fuel System	2

No	Course name	Credits
8	Automotive and Engine Testing – Practicum	2
9	Technical Diagnosis and Maintenance - Car Repair Practicum	2

4.3 Graduation internship, Graduation thesis

<i>NO</i>		
<i>1</i>	<i>Graduation Internship</i>	<i>4</i>
<i>2</i>	<i>Graduation Project (CNKTOTO)</i>	<i>6</i>
<i>Alternative courses</i>		
<i>1</i>	<i>Special Topic 1: Electric and Smart Cars</i>	<i>3</i>
<i>2</i>	<i>Special Topic 2: New Generation Combustion Engines</i>	<i>3</i>

RECTOR

**DEPARTMENT OF
ACADEMIC AFFAIRS**

FACULTY