DONG NAI TECHNOLOGY UNIVERSITY
DNTU

CURRICULUM

Major: **Automotive Engineering Technology**

Level of Education: **Bachelor**

Mode of Study: **Formal**

Duration of Study: **4.5 Years**

Qualification Awarded: **Engineer**

Academic Cohort: **Cohort 22 (2026–2031)**

Total Accumulated Credits: **152**

Courses marked with (*) are not included in the cumulative grade point average.

SEMESTER 1: 14 accumulated credits (compulsory: 11, elective: 3)							
Course Code	**Course Name**	**Number of Credits**	**Total Sessions**	**Theory Sessions**	**Practical Sessions**	**Project Sessions**	**Internship Sessions**
Compulsory Courses		**11**					
CB70411	Swimming (*)	1	1	30	0	30	0
TH70001	Informatics 1 (*)	2	45	15	30	0	0
CT70113	Engineering material	2	2	30	30	0	0
CT70106	Electrical engineering	2	45	15	30	0	0
CT70102	Technical drawing	2	30	30	0	0	0
CT70111	Basic electronics	2	30	30	0	0	0
OT70005	Principle of internal combustion engine	2	30	30	0	0	0
OT70002	Introduction to Automotive Engineering	1	15	15	0	0	0
Elective Courses		**3**					
TA71331	English 1	3	45	45	0	0	0
TQ71321	Chinese 1	3	45	45	0	0	0

SEMESTER 2: 22 accumulated credits (compulsory: 17 elective: 5)							
Course Code	**Course Name**	**Number of Credits**	**Total Sessions**	**Theory Sessions**	**Practical Sessions**	**Project Sessions**	**Internship Sessions**

Compulsory Courses		**17**					
CB70202	Advanced Mathematics	3	45	45	0	0	0
CB70101	Philosophy of Marxism and Leninism	3	45	45	0	0	0
TH70002	Informatics 2 (*)	2	45	15	30	0	0
CT70167	Basic Mechanical Practice 1	2	60	0	60	0	0
CT70109	Tolerances & Measuring Technique	2	30	30	0	0	0
CT70105	Mechanical theory	3	45	45	0	0	0
OT70003	Structure of internal combustion engine	2	30	30	0	0	0
CT70104	Autocad	2	60	0	60	0	0
Elective Courses		**5**					
TA71332	English 2	3	45	45	0	0	0
TQ71322	Chinese 2	3	3	45	45	0	0
CB70311	Occupational Safety and Engineering Environment	2	30	30	0	0	0
CB70305	Communication and Relationship Building Skills	2	30	30	0	0	0
National Defense and Security Education Courses							
CB70401	National Defense Education - 1rd Course (*)	3	45	45	0	0	0
CB70402	National Defense Education - 2rd Course (*)	2	30	30	0	0	0
CB70403	National Defense Education - 3rd Course (*)	1	30	0	30	0	0
CB70404	National Defense Education - 4rd Course (*)	2	60	0	60	0	0
Physical Education 2 (Choose 1 of 4 courses)*							
CB71412	Football (*)	1	30		30		
CB71403	Volleyball (*)	1	30		30		
CB71404	Badminton (*)	1	30		30		
CB71410	Pickleball (*)	1	30		30		

SEMESTER 3: 21 accumulated credits (compulsory: 16, elective: 5)							
Course Code	**Course Name**	**Number of Credits**	**Total Sessions**	**Theory Sessions**	**Practical Sessions**	**Project Sessions**	**Internship Sessions**
Compulsory Courses		**16**					
CB70106	Introduction of Laws	2	30	30	0	0	0
CB70206	Scientific Research Methods	2	30	30	0	0	0
CB70102	Political Economics of Marxism and Leninism	2	30	30	0	0	0
CB70203	Physics	3	45	45	0	0	0
CT71253	Muscle measurement experiments	2	60	0	60	0	0
OT70004	Automotive frame and chassis structure	3	45	45	0	0	0
CT70112	Strength of materials	2	30	30	0	0	0
Elective Courses		**5**					
TA71333	English 3	3	45	45	0	0	0
TQ71323	Chinese 3	3	45	45	0	0	0
CB71201	Computational mathematics	2	30	30	0	0	0
CB71202	Complex Functions and Laplace Transforms	2	30	30	0	0	0
Physical Education 3 (Choose 1 of 4 courses)*							
CB71413	Fitness (*)	1	30		30		
CB71407	Basketball (*)	1	30		30		
CB71414	Martial arts (*)	1	30		30		

SEMESTER 4: 21 accumulated credits (compulsory: 21 elective: 0)							
Course Code	**Course Name**	**Number of Credits**	**Total Sessions**	**Theory Sessions**	**Practical Sessions**	**Project Sessions**	**Internship Sessions**
Compulsory Courses		**21**					
CB70103	Scientific Socialism	2	30	30	0	0	0

CT70166	Machine elements	2	30	30	0	0	0
DT71235	Microprocessor	2	45	15	30	0	0
OT70040	Body electrical system and automatic control in Automotive	3	45	45	0	0	0
OT70060	Internal combustion engine practice	3	90	0	90	0	0
DT70219	Electrical machines and power electronics	3	60	30	30	0	0
OT70061	Practice in driving car	1	30	0	30	0	0
OT71009	Hydraulic pneumatic system	2	45	15	30	0	0
OT70041	Engine electrical and engine control systems on Automobile	3	45	45	0	0	0
TA70334	English for International Certification*	9	135	135	0	0	0
TQ71324	Chinese for International Certification*	9	135	135	0	0	0
SEMESTER 5: 21 accumulated credits (compulsory: 21 elective: 0)							
Course Code	**Course Name**	**Number of Credits**	**Total Sessions**	**Theory Sessions**	**Practical Sessions**	**Project Sessions**	**Internship Sessions**
Compulsory Courses		**21**					
OT70062	Automobile chassis practice	3	90	0	90	0	0
CB70104	Ho Chi Minh Ideology	2	30	30	0	0	0
OT71016	New energy and energy management in automobiles	2	30	30	0	0	0
OT70081	Electric and Hybrid Vehicles	2	45	15	30	0	0
OT70012	English for Automotive Engineering 1	2	30	30	0	0	0
OT70010	Automobile theory	3	45	45	0	0	0
OT70050	Practice the vehicle's electrical system and automatic control in Automobile	3	90	0	60	0	0
OT70019	Practice engine electrical systems and engine control	2	60	0	60	0	0
OT710030	Applying SolidWorks Software to Automotive Design	2	60	0	60	0	0
SEMESTER 6: 19 accumulated credits (compulsory: 5, elective: 14)							

Course Code	Course Name	Number of Credits	Total Sessions	Theory Sessions	Practical Sessions	Project Sessions	Internship Sessions
Compulsory Courses		**5**					
CB70105	History of Vietnamese Communist Party	2	30	30	0	0	0
OT70014	Project for Internal combustion engine course	1	15	15	0	0	0
OT70047	Artificial intelligence applied to Automotive Engineering	2	45	15	30	0	0
Elective Courses		**14**					
OT71080	Electric Vehicle Battery and Battery Management Systems (BMS)	3	45	45	0	0	0
OT71081	Fundamentals of Electric Drive Systems	3	45	45	0	0	0
OT71082	High-Voltage Electrical Safety for Electric and Hybrid Vehicles	2	30	30	0	0	0
OT71083	Electric Motors for Automotive Applications	3	45	45	0	0	0
OT71088	Electric Vehicle Charging Station Technology	3	45	45	0	0	0
Elective Courses		**14**					
OT71051	Practice Automobile maintenance and repair	3	90	0	90	0	0
OT71033	Automobile Diagnostics	3	90	0	90	0	0
OT70091	Diesel Engine Diagnosis and Maintenance	2	60	0	60	0	0
OT71032	Automatic transmission	2	60	0	60	0	0
OT71098	Practice frame and body automobile	2	60	0	60	0	0
OT70092	Gasoline Engine Diagnosis and Maintenance	2	60	0	60	0	0
SEMESTER 7: 16 accumulated credits (compulsory: 4 elective: 12)							
Course Code	**Course Name**	**Number of Credits**	**Total Sessions**	**Theory Sessions**	**Practical Sessions**	**Project Sessions**	**Internship Sessions**
Compulsory Courses		**4**					
OT70016	Automotive Structural Computaion	2	30	30	0	0	0
OT71093	Battery Systems and Charging Technologies for Electric and Hybrid Vehicles	2	30	30	0	0	0

Elective Courses		**12**					
OT71084	Electric and Hybrid Powertrain Systems	2	30	30	0	0	0
OT71085	Practice in Diagnosing Electric and Hybrid Vehicle Systems	3	90	0	90	0	0
OT71086	Practice on Electric and Hybrid Powertrain Systems	3	90	0	90	0	0
OT71087	Electric and Hybrid Vehicle Battery System Practice	4	120	0	120	0	0
Elective Courses		**12**					
OT71050	Production management	2	30	30		0	0
OT71052	Practical Training on Electric Power Steering	2	60	0	60	0	0
OT71034	Automotive Electronic Circuit Design	2	60	0	60	0	0
OT71036	Computer-Aided Simulation and Calculation in Automotive Engineering	2	60	0	60	0	0
OT71094	Automotive Inspection Technology	2	30	30	0	0	0
OT71095	Automotive Service Management and Service Advising	2	30	30	0	0	0
SEMESTER 8 : 8 accumulated credits							
Course Code	**Course Name**	**Number of Credits**	**Total Sessions**	**Theory Sessions**	**Practical Sessions**	**Project Sessions**	**Internship Sessions**
Compulsory Courses		**8**					
OT70052	Engineering Internship	8	480	0	0	0	480
Course Code	**Course Name**	**Number of Credits**	**Total Sessions**	**Theory Sessions**	**Practical Sessions**	**Project Sessions**	**Internship Sessions**
Compulsory Courses		**10**					
OT70043	Engineering graduate thesis	10	300	0	0	300	0