

# Education Plan for Academic Graduate in Automotive Engineering

(Discipline Code:080204,Award Master Degree of Engineering)

## I Objectives

Abide the law, form a good character, behave honestly and trustworthy, strictly and cooperately, and maintain good research ethics and professionalism.

Master broad and solid basic theories and systematically in-depth specialized knowledge of the discipline, be qualified in higher levels of teaching, researching, engineering technology and technological management and can make innovative achievements in the discipline or specific technology.

Master a foreign language, can skillfully read professional foreign language materials and write papers.

Maintain a good physical and mental health quality.

## II Disciplinary Research Areas

The modern automobile design and manufacture  
 Vehicle Dynamics and Control Technology  
 New energy vehicles and experimental technology  
 Automobile lightweight engineering

## III Educational System and Years of Study

The educational system for a full-time academic graduate is three years and the study period lasts generally three years, no more than five years.

## IV Curriculum System and Credit Requirements

(Curriculum System)

Course category	Course No.	Course name	Theory Hrs	experimental Hrs	Credit	Semester	School	Remark
Public Degree Courses	003281001	First Foreign Language(Chinese)	108		6	1、 2	School of Internation Education	Compulsory
	003281002	Introduction to China	54		3	1	School of Internation Education	

Course category	Course No.	Course name	Theory Hrs	experimental Hrs	Credit	Semester	School	Remark
	00721101	Lectures frontier	18		1	1	School of Automotive Engineering	
	01421061	Methods of Mathematical Physics	36		2	1	School of Science	Optiona-lly two
	01421063	Applied Mathematical Statistics	36		2	1	School of Science	
	01421062	Matrix Theory	36		2	1	School of Science	
	01421064	stochastic process	36		2	2	School of Science	
	01421065	Numeral Calculations	36		2	2	School of Science	
	01421066	mathematical model	36		2	2	School of Science	
Degree Course	00721101	Lectures frontier	18		1	1	School of Automotive Engineering	Optiona-lly three
	00721102	Vehicle Dynamics	36		2	1	School of Automotive Engineering	
	00721103	Automotive structural mechanics	36		2	2	School of Automotive Engineering	
	00721104	Vehicle Engineering Control	36		2	1	School of Automotive Engineering	
	00721105	aerodynamics	36		2	2	School of Automotive Engineering	
	00721106	Modern control theory and its application	36		2	1	School of Automotive Engineering	

Course category	Course No.	Course name	Theory Hrs	experimental Hrs	Credit	Semester	School	Remark
Non-degree Courses	00722101	New energy vehicles systems analysis and design	36		2	2	School of Automotive Engineering	
	00722102	Automotive Innovation Design	36		2	1	School of Automotive Engineering	
	00722103	Automotive Test Systems and Test Methods	36		2	2	School of Automotive Engineering	
	00722104	Automotive electronics and control technology	36		2	1	School of Automotive Engineering	
	00722105	Automotive Modeling and Simulation Technology	36		2	1	School of Automotive Engineering	
	00722106	Ergonomics	36		2	2	School of Automotive Engineering	
	00722107	Vehicle finite element analysis	36		2	1	School of Automotive Engineering	
	00722108	Automotive Welding Theory and Technology	36		2	2	School of Automotive Engineering	
	00722109	Automotive electric drive system and control	36		2	2	School of Automotive Engineering	
	00722110	Vehicle Transmission and Control	36		2	2	School of Automotive Engineering	
	00722111	Auto Body Panel Forming Theory and Technology	36		2	2	School of Automotive Engineering	

Course category	Course No.	Course name	Theory Hrs	experimental Hrs	Credit	Semester	School	Remark
	00722112	Automotive Design and Analysis	36		2	1	School of Automotive Engineering	
	00722113	Vehicle noise and vibration control	36		2	2	School of Automotive Engineering	
	00722114	Automotive prototyping and manufacturing digital simulation	18		1	2	School of Automotive Engineering	
	00722115	Automotive System Integration and match	36		2	1	School of Automotive Engineering	
	00722116	Automotive Safety and Simulation	36		2	1	School of Automotive Engineering	
	00722117	Measurement and control technology base	36		2	1	School of Automotive Engineering	
	00722118	Automotive Coating Technology	18		1	1	School of Automotive Engineering	
	00722119	Automotive chassis control technology	18		2	1	School of Automotive Engineering	
	00722120	Automotive lightweight design and manufacture of the comprehensive laboratory course	36		2	2	School of Automotive Engineering	
	00722121	Automotive Lightweight Technology	36		2	1	School of Automotive Engineering	

Course category	Course No.	Course name	Theory Hrs	experimental Hrs	Credit	Semester	School	Remark
	00722122	Automotive electronic control system hardware in the loop simulation (compulsory)	18		1	2	School of Automotive Engineering	
	00722123	TNCs and international automobile industry	18		1	2	School of Automotive Engineering	
	00722124	Professional Foreign Language (compulsory)	18		1	1	School of Automotive Engineering	
	00722125	Energy Harvesting	18		1	1	School of Automotive Engineering	
Interdisciplinary elective course	02223001	Taijiquan and its	18		1	1	Department of Physical Education	
Compulsory	00724004	Practice			3	3		
	00724002	Topics Report			1	3		
	00724003	Academic Activity	5 times		1	4		

2. (Credit Requirements)

Subject	Total credits	Credits for degree courses ( $\geq 17$ Credits)				Elective courses ( must set up an experimental course or research methods course )	Credits for Compulsory Parts
		General course			Professional degree course		
		Ideological and political lesson	Foreign language	Mathematics			
Science and Technology	$\geq 27$	3	4	4	$\geq 6$	$\geq 5$	5