

轮机工程专业本科培养计划

Undergraduate Program for Specialty in Marine Engineering

一、培养目标

I. Program Objective

培养从事轮机工程及其自动化的设计、监造、检测、试验与研究的高级工程技术人才。

The program is designed to prepare top-ranking engineering technicians of design, inspection, testing as well as research in the field of marine engineering and automation.

二、基本规格要求

II. Learning Outcomes

毕业生应获得以下几方面的知识和能力：

1. 掌握数学、物理、力学等基础理论，为吸收新技术知识，进行技术创新打下良好的基础；
2. 掌握本专业所必需的机械设计与制造，电路与电子学、计算机及应用等基本知识和基本技能，具有应用机电一体化技术的初步能力；
3. 掌握船舶动力装置、船舶电力系统、轮机自动化的设计与计算，性能测试与分析的理论与方法，具有初步的设计能力和创新意识；
4. 具有履行轮机工程监造、检测职责的初步能力；
5. 熟悉一门外语，能阅读专业书刊，具有一定的听说能力，英语达到国家四级以上水平（含四级）。

Students are supposed to obtain:

1. Basic theories on mathematics, physics of mechanics;
2. Basic theories and skills of machine design and manufacturing, electrical and electronic techniques as well as computer science, which are necessary for the major;
3. Mastery of theories and methods on design and calculation of marine engineering system, and testing and analyzing on the systems performance; initial design ability and innovative thinking;
4. Basic ability in carrying out marine engineering supervision and testing;
5. Mastery of a foreign language (National College English Test Band 4 level or higher) and the ability to employ technical resources in foreign test.

三、培养特色

III. Program Highlights

本专业把船舶动力机械、电力系统与自动化融合于一体，形成基础理论扎实，专业知识宽广的专业模式；知识技能的传授注重理论与实践的有机结合和人才综合素质的培养；毕业生不仅受船舶行业的青睐，而且对非船舶行业也有很强的适应能力。

This program is the combination of Dynamic Mechanic, Electric Power system and Marine Automation, thus forming a specialty pattern of solid basic theory and wide knowledge of specialty. The emphasis of imparting knowledge and skills is on the combination of theory with practice and the cultivation and comprehensive qualities of students. Graduates are not only welcomed in ship engineering field, but also have good adaptation to other fields.

四、主干学科

IV. Main Disciplines

轮机工程 Marine Engineering、机械工程 Mechanical Engineering、动力工程 Power Engineering、自动化 Automation

五、学制与学位

V. Program Length and Degree

修业年限：四年

Duration: 4 years

授予学位：工学学士

Degrees Conferred: Bachelor of Engineering

六、学时与学分

VI. Credit Hours and Units

完成学业最低课内学分（含课程体系与集中性实践教学环节）要求：160 学分

Minimum Credits of Curricular (Comprising course system and intensified internship practical training): 160credits

其中专业基础课程、专业核心课程学分不允许用其他课程学分进行冲抵和替代。

Major-related basic courses and core courses cannot be covered using credits from other courses in the program.

完成学业最低课外学分要求：5 学分

Minimum Extracurricular Credits: 5 credits.

1. 课程体系学时与学分

Course credits hours and units

课程类别		课程性质	学时/学分	占课程体系学分比例（%）
通识教育基础课程		必修	1048/60	41.8
		选修	160/10	7.0
学科基础课程	学科大类基础课程	必修	616/38	26.5
	学科专业基础课程	必修	208/13	9.1
专业课程	专业核心课程	必修	148/10.5	7.3
	专业方向课程	选修	≥192/12	8.4
合计			2372/143.5	100

Course Type		Required / Elective	Hrs/Crs	Percentage (%)
General Education Core Curriculum		Required	1048/60	41.8
		Elective	160/10	7.0
Discipline-related courses	Discipline-related General Courses	Required	616/38	26.5
	Basic Sub-disciplinary Courses	Required	208/13	9.1
Major-specific Courses	Major-specific Core Courses	Required	148/10.5	7.3
	Major-specific Electives	Elective	≥192/12	8.4
Total			2372/143.5	100

2. 集中性实践教学环节周数与学分

Practicum credits

华中科技大学本科专业人才培养计划

实践教学环节名称	课程性质	周数/学分	占实践教学环节学分比例 (%)
军事训练	必修	2w/1	6.1
公益劳动	必修	1w/0.5	3.0
金工实习	必修	3w/1.5	9.1
电工实习	必修	2w/1	6.1
专业实习 I	必修	2w/1	6.1
专业实习 II (社会实践)	必修	2w/1	6.1
课程设计	必修	8w/4	24.2
毕业设计 (论文)	必修	13w/6.5	39.4
合计		33w/16.5	100

Courses Title	Required / Elective	Weeks/Credits	Percentage (%)
Military Training	Required	2w/1	6.1
Laboring for Public Benefit	Required	1w/0.5	3.0
Industrial Practice	Required	3w/1.5	9.1
Electrical Engineering Practice	Required	2w/1	6.1
Cognitive Practice	Required	2w/1	6.1
Engineering Internship (Social Practice)	Required	2w/1	6.1
Course Project	Required	8w/4	24.2
Undergraduate Thesis	Required	13w/6.5	39.4
Total		33w/16.5	100

3. 课外学分

Extracurricular credits

序号	课外活动名称	课外活动和社会实践的要求		课外学分
1	社会实践活动	提交社会调查报告, 通过答辩者		1
		个人被校团委或团省委评为社会实践活动积极分子者, 集体被校团委或团省委评为优秀社会实践队者		2
2	英语及计算机考试	全国大学英语六级考试	获六级证书者	2
		全国计算机等级考试	获二级以上证书者	2
		全国计算机软件资格、水平考试	获程序员证书者	2
			获高级程序员证书者	3
			获系统分析员证书者	4
3	竞赛	校级	获一等奖者	3
			获二等奖者	2
			获三等奖者	1
		省级	获一等奖者	4
			获二等奖者	3
			获三等奖者	2
		全国	获一等奖者	6
			获二等奖者	4
			获三等奖者	3
4	论文	在全国性刊物发表论文	每篇论文	2~3
5	科研	视参与科研项目时间与科研能力	每项	1~3
6	实验	视创新情况	每项	1~3

注: 参加校体育运动会获第一名、第二名者与校级一等奖等同, 获第三名至第五名者与校级二等奖等同, 获第六至第八名者与校级三等奖等同。

华中科技大学本科专业人才培养计划

No.	Activities	Requirements		Extracurricular Credits
1	Community Engagement	Submitting report and passing oral defense		1
		Individuals awarded “Active Participant” / Teams awarded “Excellent Performance” by HUST or Hubei Youth League Committee		2
2	Qualifications	CET-6	Certificate of Band-6 meeting the requirement	2
		National Computer Rank Examination	Certificate of Band-2 or higher	2
		National Computer Software Qualification	Certificate of programmer	2
			Certificate of Advanced Programmer	3
			Certificate of System Analyst	4
3	Competitions	University Level	First prize	3
			Second prize	2
			Third prize	1
		Provincial Level	First prize	4
			Second prize	3
			Third prize	2
		National Level	First prize	6
			Second prize	4
			Third prize	3
4	Academic Papers	Published in national-level journals	Each Paper	2~3
5	Research Programs	Contribution and research capability	Each program	1~3
6	Experiments	Innovation capacity	Each item	1~3

Note: In HUST Sports Meeting, the first and the second prize, the third to the fifth prize, and the sixth prize to the eighth prize are deemed respectively the first prize, the second prize and the third prize of university level.

七、主要课程

VII. Main Courses

理论力学 Theoretical Mechanics、材料力学 Material Mechanics、流体力学 Fluid Mechanics、模拟电子学 Analog Electronics、液压与气压传动 Hydraulic and Pneumatic Transmission、船舶原理 Principle of Naval、内燃机原理 Principle of Combustion Engine、轮机自动化原理 Principle of Marine Automation 船舶动力装置原理与设计 Principle and Design of Marine Power Engineering、船舶辅机 Naval Auxiliary Machinery、船舶电力系统与装置 Ship Power System & Device、动力机械振动噪声与测量 Vibration, Noise and Measurement of Dynamic Mechanic、海洋开发技术 Ocean Exploiting Technology。

八、主要实践教学环节

VIII. Practicum Module (Experiments Included)

金工实习 Industrial Practice、电工实习 Electrical Engineering Practice、认知实习 Cognitive Practice、生产实习 (社会实践) Engineering Internship (Social Practice)、课程设计 Course Project、毕业设计(论文) Undergraduate Thesis、热力发动机原理实验 Experiments of Principle of Combustion Engine、轮机自动化原理实验 Experiments of Principle of Marine Automation、物理实验(一) Physics Experiment (I)、材料力学实验 Material Mechanics Experiment、电路理论实验 Circuit Theory

Experiment、模拟电子技术(三) 实验 Experiments of Analog Electrics Technology(III)、机械原理实验 Experiments of Machine Theory、机械设计基础实验 Experiments of Foundation of Machine Design、工程控制基础实验 Experiments of Project Control、工程测试技术实验 Experiments of Project Measure Technology、机械制造技术基础实验 Experiments of Foundation of Mechanical Manufacture、工程材料实验 Experiments of Project Materials、船舶电力系统与装置实验 Experiments of Ship Power System and Device

九、教学进程计划表

IX. Course Schedule

院(系): 船舶与海洋工程学院

专业: 轮机工程

School (Department): School of Naval Architecture & Ocean Engineering

Major: Marine Engineering

课程类别 course type	课程性质 required/ elective	课程代码 course code	课程名称 course name	学时 hrs	学分 crs	其中 Including			设置学期 semester
						课外 extra-cur.	实验 exp.	上机 operation	
通识教育基础课程 General Education Core Curriculum	必修 required	0301902	思想道德修养与法律基础 Morals & Ethics & Fundamentals of Law	40	2.5	8			1
	必修 required	0100721	中国近现代史纲要 Survey of Modern Chinese History	32	2	8			2
	必修 required	0100733	马克思主义原理 Basic Theory of Marxism	40	2.5	8			3
	必修 required	0100932	思政课社会实践 Social Practice of Ideological and Political Theories Course	24	1.5	20			2
	必修 required	0100322	毛泽东思想和中国特色社会主义理论体系概论 General Introduction to Mao Zedong Thought and Socialist Theory with Chinese Characteristics	56	3.5				3
	必修 required	0100741	形势与政策 Situation and Policy	32	2	14			1~6
	必修 required	0510071	中国语文 Chinese	32	2	10			1
	必修 required	0827781	计算机及程序设计基础 (C++) Fundamentals of Computer Programming (C++)	48	3			24	1
	必修 required	0508453	综合英语 (一) Comprehensive English(I)	56	3.5				1
	必修 required	0508463	综合英语 (二) Comprehensive English(II)	56	3.5				2
	必修 required	0700011	微积分 (一) 上 Calculus (I) 1 st half	88	5.5				1
	必修 required	0700012	微积分 (一) 下 Calculus (I) 2 nd half	88	5.5				2
	必修 required	0700048	大学物理 (一) Physics (I)	64	4				2
	必修 required	0700049	大学物理 (二) Physics (II)	64	4				3

续表

课程类别 course type	课程性质 required/ elective	课程代码 course code	课程名称 course name	学时 hrs	学分 crs	其中 Including			设置学期 semester
						课外 extra-cur.	实验 exp.	上机 operation	
通识教育基础课程 General Education Core Curriculum	必修 required	0706891	物理实验（一） Physics Experiments (I)	32	1				2
	必修 required	0706901	物理实验（二） Physics Experiments (II)	24	0.8				3
	必修 required	0400111	大学体育（一） Physical Education(I)	32	1				1
	必修 required	0400121	大学体育（二） Physical Education(II)	32	1				2
	必修 required	0400131	大学体育（三） Physical Education(III)	32	1				3
	必修 required	0400141	大学体育（四） Physical Education(IV)	32	1				4
	必修 required	1100011	军事理论 Military Theory	16	1				1
	必修 required	0700051	线性代数（一） Linear Algebra (I)	40	2.5				2
	必修 required	0700071	复变函数与积分变换 Complex Function and Integral Transform	40	2.5				3
	必修 required	0700063	概率论与数理统计（三） Probability and Mathematics Statistic (III)	40	2.5				3
	必修 required	0811163	计算机网络技术及应用* Foundation of Network Technology	32	2			8	4
	必修 required	0833174	数据库技术及应用* Database System Technology	32	2			8	4
			* “计算机网络技术及应用”与“数据库技术及应用”两门课二选一 One out of “Foundation of Network Technology” and “Database System Technology” is required.						
	选修 elective		人文社科类选修课程** Electives in Humanities and Social Science	160	10				不限
			**其中限定选修艺术类课程 2 学分 2 credit units of artistic course are required among this type.						
	必修 required	0826611	工程制图（五）上 Engineering Graphics(V) 1 st half	40	2.5				1
	必修 required	0827421	工程制图（五）下 Engineering Graphics(V) 2 nd half	64	4				2
	必修 required	0827702	理论力学 Theoretical Mechanics	56	3.5				3
	必修 required	0800073	材料力学（二） Material Mechanics (II)	56	3.5				4

续表

课程类别 course type	课程性质 required/ elective	课程代码 course code	课程名称 course name	学时 hrs	学分 crs	其中 Including			设置学期 semester
						课外 extra-cur.	实验 exp.	上机 operation	
学科大类基础课程 Discipline-related General Courses	必修 required	0800118	电路理论 Circuit Theory	40	2.5		6		3
	必修 required	0806714	工程力学实验 Experiments on Engineering Mechanics	16	0.5		12		4
	必修 required	0800123	模拟电子技术（三） Analogue Electronics (III)	40	2.5		14		4
	必修 required	0800096	机械原理 Theory of Machines and Mechanisms	32	2		4		4
	必修 required	0820943	工程控制基础 Foundation of Engineering Control	32	2				4
	必修 required	0800363	机械制造技术基础 Foundation of Mechanical Manufacture	40	2.5		4		4
	必修 required	0807301	工程材料学 Engineering Materials	32	2		4		4
	必修 required	0815671	工程控制实验(一) Experiment on Foundation of Project Control(I)	8	0.5				4
	必修 required	0820962	工程测试技术 Engineering Measure Technology	32	2				5
	必修 required	0812301	工程传热学（一） Heat Transfer (I)	32	2		4		5
	必修 required	0800061	流体力学（一） Fluid Mechanics (I)	32	2		4		5
	必修 required	0815661	工程测试技术实验(一) Experiment on Engineering Measuring(I)	8	0.5				5
	必修 required	0821321	机械设计（三） Machine Design(III)	56	3.5		6		6
学科专业基础课程 Basic Sub-disciplinary Courses	必修 required	0801931	船舶与海洋工程导论 Introduction to Naval Arch & Ocean Engineering.	16	1				2
	必修 required	0806601	轮机工程导论 Introduction to Marine Engineering	24	1.5				3
	必修 required	0801942	船舶原理 Principle of Naval	32	2				5
	必修 required	0800295	液压与气压传动 Hydraulic and Pneumatic Transmission	40	2.5		4		6
	必修 required	0806512	热力发动机原理 Principle of Combustion Engine	32	2		6		5
	必修 required	0809801	可靠性技术基础 Foundation of Reliability Technology	32	2				5
	必修 required	0820261	船舶机电传动控制技术 Marine Mechanical & Electrical Transmission Control Technology	32	2		4		6

续表

课程类别 course type	课程性质 required/ elective	课程代码 course code	课程名称 course name	学时 hrs	学分 crs	其中 Including			设置学期 semester
						课外 extra-cur.	实验 exp.	上机 operation	
Major-specific Core Courses 专业核心课程	必修 required	0806552	轮机自动化原理 Principle of Marine Automation	40	2.5		6		6
	必修 required	0806573	船舶辅机 Naval Auxiliary Machinery	32	2				6
	必修 required	0806533	船舶电力系统与装置 Ship Power System & Device	32	2		8		6
	必修 required	0802012	船舶动力装置原理与设计 Principle and Design of Marine Power Engineering	32	2				6
	必修 required	0828631	轮机工程仿真技术及应用 Foundation of Simulation Technology	32	2				7
专业方向选修课程 * Major-specific Electives	选修 elective	0811323	微机接口与船舶应用 Microcomputer Interface Techniques & Marine Application	32	2			8	5
	选修 elective	0828641	轮机工程专业英语 Specialty English of Marine Engineering	32	2				7
	选修 elective	0806543	轮机建造工艺 Manufacturing Technology of Marine Engineering	32	2				7
	选修 elective	0806524	动力机械振动噪声与测量 Vibration Noise and Measurement of Dynamic Mechanic	32	2				7
	选修 elective	0828051	船舶与海洋工程液压系统 Hydraulic System in Marine Engineering	24	1.5				7
	选修 elective	0806562	海洋开发系统与装置 Ocean Exploitation System and Apparatus	24	1.5				7
	选修 elective	0828061	海洋动力定位技术 Dynamic Orientation in Ocean	24	1.5				7
	选修 elective	0828071	水下遥控作业技术 Remote Controlled Underwater Operation	24	1.5				7
	选修 elective	0800919	CAD 技术基础 CAD Technology Basis	24	1.5			12	7
	选修 elective	0828081	船舶管理 Ship Management	24	1.5				7
实践环节 Practical training items	必修 required	1300013	军事训练 Military Training	2w	1				1
	必修 required	1300024	公益劳动 Labouring for Public Benefit	1w	0.5				2
	必修 required	1304411	电工实习 Electrical Engineering Practice	2w	1				3
	必修 required	1302332	金工实习 Industrial Practice	3w	1.5				4
	必修 required	1301923	专业实习(一) Engineering Internship (I)	2w	1				4

续表

课程类别 course type	课程性质 required/ elective	课程代码 course code	课程名称 course name	学时 hrs	学分 crs	其中 Including			设置学期 semester
						课外 extra-cur.	实验 exp.	上机 operation	
实践环节 Practical training items	必修 required	1301924	专业实习(二) Engineering Internship (II)	2w	1				6
	必修 required	1302391	课程设计(一)机械设计 Course Project(I)	2w	1				6
	必修 required	1302401	课程设计(二)船舶动力装置设计 Course Project(II)	2w	1				7
	必修 required	1302411	课程设计(三)船舶电力系统设计 Course Project(III)	2w	1				7
	必修 required	1302421	课程设计(四)轮机自动化课设 Course Project(IV)	2w	1				7
	必修 required	130004c	毕业设计 (论文) Undergraduate Thesis	13w	6.5				8
			*本专业方向选修课程要求学分不少于 12 学分或 192 学时。 The Major-specific Electives courses should be chosen no less than 12 credit units or 192 credit hours.						

轮机工程第二主修专业培养计划

Undergraduate Program for the Second Specialty in Marine Engineering

一、培养目标

I. Program Objective

培养从事轮机工程及其自动化的设计、监造、检测、试验的高级工程技术人才。毕业生应获得以下几方面的知识和能力：

1. 掌握数学、物理、力学等基础理论，为吸收新技术知识，进行技术创新打下良好的基础。
2. 掌握本专业所必需的机械设计与制造，电工与电子学、计算机及应用等基本知识和基本技能，具有应用机电一体化技术的初步能力。
3. 掌握船舶动力系统的设计与计算，性能测试与分析的理论与方法，具有初步的设计能力和创新意识。
4. 具有履行轮机工程监造、检测职责的初步能力。

The program is designed to prepare top-ranking engineering technicians of design, inspection, testing as well as research in the field of marine engineering and automation.

Students are supposed to obtain:

1. Basic theories on mathematics, physics of mechanics;
2. Basic theories and skills of machine design and manufacturing, electrical and electronic techniques as well as computer science, which are necessary for the major;
3. Mastery of theories and methods on design and calculation of marine engineering system, and testing and analyzing on the systems performance; initial design ability and innovative thinking; and
4. Basic ability in carrying out marine engineering supervision and testing.

二、学位

II. Degree

工学学士

Bachelor of Engineering

三、学分

III. Credit Units

完成学业最低学分要求：47.5

Minimum Course Credits : 47.5

其中：

Including：

学科大类基础课程：≥22.5 学分

Discipline-related General Courses : ≥22.5

学科专业基础课程：≥10 学分

Basic Sub-discipline Courses : ≥10

专业课程：10 学分

Major-specific Courses in Specialty : 10

毕业设计：5 学分

Undergraduate Thesis : 5

四、教学进程计划表

IV. Courses Schedule

课程类别 course type	课程性质 required/ elective	课程代码 course code	课程名称 course name	学时 hrs	学分 crs	其中 Including			设置学期 semester
						课外 extra-cur.	实验 exp.	上机 operation	
学科大类基础课程 Discipline-related General Courses	选修 elective	0826611	工程制图（五）上 Engineering Graphics(V)	40	2.5				1
	选修 elective	0827421	工程制图（五）下 Engineering Graphics(V)	64	4				2
	选修 elective	0827702	理论力学 Theoretical Mechanics	56	3.5				3
	选修 elective	0800073	材料力学（二） Material Mechanics (II)	56	3.5				4
	选修 elective	0800118	电路理论 Circuit Theory	40	2.5		6		3
	选修 elective	0806714	工程力学实验 Experiments on Engineering Mechanics	16	0.5		12		4
	选修 elective	0800123	模拟电子技术（三） Analogue Electronic (III)	40	2.5		14		4
	选修 elective	0800096	机械原理 Theory of Machines and Mechanisms	32	2		4		4
	选修 elective	0820942	工程控制基础 Foundation of Engineering Control	32	2				4
	选修 elective	0800363	机械制造技术基础 Foundation of Mechanical Manufacture	40	2.5		4		4
	选修 elective	0807301	工程材料学 Engineering Materials	32	2		4		4
	选修 elective	0815671	工程控制实验(一) Experiment on Foundation of Project Control(I)	8	0.5				4
	选修 elective	0820962	工程测试技术 Engineering Measure Technology	32	2				5
	选修 elective	0812301	工程传热学（一） Heat Transfer (I)	32	2		4		5
	选修 elective	0800061	流体力学（一） Fluid Mechanics (I)	32	2		4		5
	选修 elective	0815661	工程测试技术实验(一) Experiment on Engineering Measuring(I)	8	0.5				5
	选修 elective	0821321	机械设计（三） Machine Design(III)	56	3.5		6		6
学科专业基础课程	选修 elective	0801931	船舶与海洋工程导论 Introduction to Naval Arch & Ocean Engineering.	16	1				2
	选修 elective	0806601	轮机工程导论 Introduction to Marine Engineering	24	1.5				3

续表

课程类别 course type	课程性质 required/ elective	课程代码 course code	课程名称 course name	学时 hrs	学分 crs	其中 Including			设置学期 semester
						课外 extra-cur.	实验 exp.	上机 operation	
Basic Sub-disciplinary Courses	选修 elective	0801942	船舶原理 Principle of Naval	32	2				5
	选修 elective	0800295	液压与气压传动 Hydraulic and Pneumatic Transmission	40	2.5		4		6
	选修 elective	0820261	船舶机电传动控制技术 Marine Mechanical & Electrical Transmission Control Technology	32	2		4		6
Major-specific Core Courses 专业核心课程	选修 elective	0806552	轮机自动化原理 Principle of Marine Automation	40	2.5		6		6
	选修 elective	0806573	船舶辅机 Naval Auxiliary Machinery	32	2				6
	选修 elective	0806533	船舶电力系统与装置 Ship Power System & Device	32	2		8		6
	选修 elective	0802012	船舶动力装置原理与设计 Principle and Design of Marine Power Engineering	32	2				6
	选修 elective	0806512	热力发动机原理 Principle of Combustion Engine	32	2		6		5
实践环节 Practical training items	选修 elective	1300043	毕业设计（论文） Undergraduate Thesis	10w	5				8

轮机工程辅修专业培养计划

Undergraduate Program for Auxiliary Specialty in Marine Engineering

一、培养目标

I. Program Objective

培养能参与轮机工程及其自动化的设计、监造、检测、试验与管理的工程技术人才。毕业生应获得以下几方面的知识和能力：

1. 掌握数学、物理、力学等基础理论，为吸收新技术知识，进行技术创新打下一定的基础。
2. 掌握本专业所必需的机械设计与制造，电工与电子学、计算机及应用等基本知识和基本技能，具有应用机电一体化技术的初步能力。
3. 能参与船舶动力系统的设计与计算，性能测试与分析，具有初步的设计能力和创新意识。
4. 具有履行轮机工程监造、检测职责的初步能力。

The program is designed to prepare top-ranking engineering technicians of design, inspection, testing as well as research in the field of marine engineering and automation.

Students are supposed to obtain:

1. Basic theories on mathematics, physics of mechanics;
2. Basic theories and skills of machine design and manufacturing, electrical and electronic techniques as well as computer science, which are necessary for the major;
3. Mastery of theories and methods on design and calculation of marine engineering system, and testing and analyzing on the systems performance; initial design ability and innovative thinking;
4. Basic ability in carrying out marine engineering supervision and testing.

二、学分

II. Credits

完成学业最低学分要求：28

Minimum Course Credits : 28

其中：

Including：

学科基础课程：23 学分

Basic Courses in Discipline: 23

学科专业课程：5 学分

Courses in Specialty : 5

三、教学进程计划表

III. Courses Schedule

课程类别 course type	课程性质 required/ elective	课程代码 course code	课程名称 course name	学时 hrs	学分 crs	其中 Including			设置学期 semester
						课外 extra-cur.	实验 exp.	上机 operation	
	选修 elective	0826611	工程制图（五）上 Engineering Graphics(V)	40	2.5				1
	选修 elective	0827702	理论力学 Theoretical Mechanics	56	3.5				3

续表

课程类别 course type	课程性质 required/ elective	课程代码 course code	课程名称 course name	学时 hrs	学分 crs	其中 Including			设置学期 semester
						课外 extra-cur.	实验 exp.	上机 operation	
学科大类基础课程 Discipline-related General Courses	选修 elective	0800073	材料力学（二） Material Mechanics (II)	56	3.5				4
	选修 elective	0800123	模拟电子技术（三） Analogue Electronic (III)	40	2.5		14		4
	选修 elective	0800096	机械原理 Theory of Machines and Mechanisms	32	2		4		4
	选修 elective	0820943	工程控制基础 Foundation of Engineering Control	32	2				4
	选修 elective	0807301	工程材料学 Engineering Materials	32	2		4		4
	选修 elective	0821321	机械设计（三） Machine Design(III)	56	3.5		6		6
学科专业基础课程 Sub-disciplinary Courses Basic	选修 elective	0801942	船舶原理 Principle of Naval	32	2				5
	选修 elective	0800295	液压与气压传动 Hydraulic and Pneumatic Transmission	40	2.5		4		6
	选修 elective	0820261	船舶机电传动控制技术 Marine Mechanical & Electrical Transmission Control Technology	32	2		4		6
专业核心课程 Major-specific Core Courses	选修 elective	0806552	轮机自动化原理 Principle of Marine Automation	40	2.5		6		6
	选修 elective	0806573	船舶辅机 Naval Auxiliary Machinery	32	2				6
	选修 elective	0806533	船舶电力系统与装置 Ship Power System & Device	32	2		8		6
	选修 elective	0802012	船舶动力装置原理与设计 Principle and Design of Marine Power Engineering	32	2				6
	选修 elective	0806512	热力发动机原理 Principle of Combustion Engine	32	2		6		5