

# 浙江科技学院数字媒体技术专业培养方案

## 一、培养目标

本专业学习主要面向互联网领域，学习和运用数字图形、图像、音视频等二维和三维媒体的基本理论及专业知识，接受面向计算机、媒体、网络交叉领域的设计制作与软件开发的基本训练。以数字媒体为载体，进行互联网产品，尤其是无线移动互联网产品的需求分析、交互研究、视觉设计、系统架构、代码开发、产品测试以及产品管理及运营知识与技能的系统学习和研究。使学生能够将技术开发与艺术设计能力有机结合，利用最前沿的计算机互联网应用技术，融合最符合人机工程学的交互方式与视觉设计，创造出最易用的互联网应用产品，成为能在各类应用领域内从事数字媒体的分析、设计、创意、制作、开发、生产、教学等工作的复合应用型高级工程技术人才。

## 二、毕业要求

- 1. 工程知识：能够将数学、自然科学、工程基础和专业基础知识综合应用，解决数字媒体技术领域相关问题。
- 2. 问题分析：能够应用数学、自然科学、工程科学以及艺术设计的基本原理，识别、表达、并通过文献研究分析数字媒体技术领域复杂问题，并获得有效结论。
- 3. 设计/开发解决方案：能够设计针对数字媒体技术领域问题的解决方案，设计满足特定用户需求的数字媒体系统，并能够在设计环节中体现创新意识，考虑社会、健康、安全、法律、文化以及环境等因素。
- 4. 研究：能够基于科学原理并采用科学方法对数字媒体技术领域复杂问题进行研究，包括设计实验、分析与解释数据、并通过信息综合得到合理有效的结论。
- 5. 使用现代工具：能够针对数字媒体技术领域复杂问题，开发、选择与使用恰当的技术、资源、现代工程工具和信息技术工具。
- 6. 工程与社会：能够基于工程相关背景知识进行合理分析，评价专业工程实践和复杂工程问题解决方案对社会、健康、安全、法律以及文化的影响，并理解应承担的责任。
- 7. 环境和可持续发展：能够理解和评价针对数字媒体技术领域复杂问题的专业工程实践对环境、社会可持续发展的影响。
- 8. 职业规范：具有人文社会科学素养、社会责任感，能够在工程实践中理解并遵守工程职业道德和规范，履行责任。
- 9. 个人和团队：能够在多学科背景下的团队中承担个体、团队成员以及负责人的角色。
- 10. 沟通：能够就数字媒体技术领域复杂工程问题与业界同行及社会公众进行有效沟通和交流，包括撰写报告和设计文稿、陈述发言、清晰表达或回应指令。并具备一定的国际视野，能够在跨文化背景下进行沟通和交流。
- 11. 项目管理：理解并掌握工程管理原理与经济决策方法，并能在多学科环境中应用。
- 12. 终身学习：具有自主学习和终身学习的意识，有不断学习和适应发展的能力。

## 三、毕业要求达成矩阵

毕业要求	指标点	相关教学活动	学生考核方式
1.工程知识：能够将数学、自然科学、工程基础和专业基础知识综合应用，解决数字媒体技术领域相关问题。	1.1掌握从事本专业所需的数学、物理知识	高等数学、大学物理、线性代数、概率论与数理统计、专业物理与数学	课程平时考核； 期末考核
	1.2掌握计算机程序设计相关知识和技能	程序设计基础、数据结构与算法、数据库系统设计基础、计算机系统、HTML5程序设计	课程平时考核； 期末考核
	1.3具备一定的艺术修养和艺术设计能力	艺术基础、数字媒体设计基础、色彩构成、动漫设计	课程平时考核； 期末考核
	1.4掌握图形图像，音视频信号处理和网络通信的基本理论	数字图像处理、三维图形学、多媒体网络、数字音视频编码	课程平时考核； 期末考核
	1.5掌握摄影、数字视频、动画创作的基本理论和方法	摄影摄像基础、视频制作原理与技术、二维动画原理与设计、三维场景设计、数字媒体后期制作	课程平时考核； 期末考核
2.问题分析：能够应用数学、自然科学、工程科学以及艺术设计的基本原理，识别、表达、并通过文献研究分析数字媒体技术领域复杂问题，并获得有效	2.1具备良好的数字媒体产品需求分析的能力，能对数字媒体产品开发相关问题进行抽象和建模	互联网产品交互设计、数据结构与算法、系统架构分析与设计、设计模式、视频制作原理与技术、游戏设计与开发	课程平时考核； 期末考核
	2.2具备良好的数字媒体产品交互设计能力，并利用草图、原型等工程方法描述相关问题。	互联网产品交互设计、艺术基础、数字媒体设计基础、移动产品视觉设计	课程平时考核； 期末考核

效结论。	2.3 利用互联网等现代信息技术方法获取资料和专业文献并进行研究分析	第二课堂、认知实习、毕业设计	课程平时考核; 期末考核
3.设计/开发解决方案：能够设计针对数字媒体技术领域问题的解决方案，设计满足特定用户需求的数字媒体系统，并能够在设计环节中体现创新意识，考虑社会、健康、安全、法律、文化以及环境等因素。	3.1具备良好的数字媒体产品设计、开发与管理能力	互联网产品交互设计、系统架构分析与设计、游戏设计与开发、移动设备程序设计、设计模式、视频制作课程设计、影视后期制作、商业摄影	课程平时考核; 期末考核
	3.2 针对特定复杂数字媒体技术领域相关问题的需求，能够提出并设计合理的解决方案，并能考虑社会、健康、安全、法律、文化及环境等因素。	思想道德修养与法律基础、互联网产品交互设计、系统架构分析与设计、游戏设计与开发、移动设备程序设计、专业高级技术拓展	课程平时考核; 期末考核
	3.3具备追求创新的态度和意识，能在工程实践中提出新思路和新方案。	创业基础、第二课堂	课程平时考核; 期末考核
4.研究：能够基于科学原理并采用科学方法对数字媒体技术领域复杂问题进行研究，包括设计实验、分析与解释数据、并通过信息综合得到合理有效的结论。	4.1 掌握数字媒体产品开发可行性分析、需求获取方法得到结论并规范化描述。	互联网产品交互设计、项目案例设计与开发实践、毕业设计	课程平时考核; 期末考核
	4.2 能够设计合理的实验和方法对数字媒体产品需求、构架、开发和相关技术文档等进行测试评估。	互联网产品交互设计、专业高级技术拓展、项目案例设计与开发实践	课程平时考核; 期末考核
5.使用现代工具：能够针对数字媒体技术领域复杂问题，开发、选择与使用恰当的技术、资源、现代工程工具和信息技术工具。	5.1 掌握数字媒体产品设计和开发过程中使用的各种工具和方法	程序设计基础（开发工具）、视频制作原理与技术（媒体制作工具）、互联网产品交互设计（需求分析、原型设计）、移动产品视觉设计（界面设计工具）、设计模式、专业高级技术拓展（测试工具）等等	课程平时考核; 期末考核
	5.2 掌握多种开发工具、技术资源和方法的特性，针对特定复杂数字媒体技术相关领域问题对其进行分析、比较和选择。	综合程序设计课程设计、视频制作课程设计、互联网产品交互设计、数字媒体产品设计课程设计、项目案例设计与开发实践、第二课堂、技术实习、毕业设计	课程平时考核; 期末考核
	5.3了解数字媒体技术领域的发展现状和趋势，以及数字媒体技术前沿技术	数字媒体技术导论、大数据与云技术、人工智能、虚拟现实与数字娱乐、专业高级技术拓展	课程平时考核; 期末考核
6.工程与社会：能够基于工程相关背景知识进行合理分析，评价专业工程实践和复杂工程问题解决方案对社会、健康、安全、法律以及文化的影响，并理解应承担的责任。	6.1 掌握人、计算机、艺术、社会等之间关系，了解数字媒体技术相关领域实践问题可能对社会、健康、安全、法律及文化方面的影响。	思想道德修养与法律基础、数字媒体技术导论、专业高级技术拓展	课程平时考核; 期末考核
	6.2 理解并运用数字媒体技术行业中相关的行业规范、国际标准和法律法规，评价数字媒体技术相关领域实践和复杂工程问题解决方案对社会、健康、安全、法律以及文化的影响，并理解应承担的责任。	思想道德修养与法律基础、形势与政策、数字媒体技术导论、网络信息安全	课程平时考核; 期末考核

7.环境和可持续发展：能够理解和评价针对数字媒体技术领域复杂问题的专业工程实践对环境、社会可持续发展的影响。	7.1 理解数字媒体技术实践所涉及的环境保护和社会可持续发展的方针、政策和法律。	思想道德修养与法律基础、数字媒体技术导论、多媒体网络、网络信息安全、形势与政策	课程平时考核； 期末考试
	7.2 能认识并评价复杂数字媒体技术相关领域问题的专业实践和对环境以及社会可持续发展的影响。	数字媒体技术导论、形势与政策、技术实习、毕业设计	课程平时考核； 期末考试
8.职业规范：具有人文社会科学素养、社会责任感，能够在工程实践中理解并遵守工程职业道德和规范，履行责任。	8.1 能够树立正确的世界观、人生观、价值观，具备良好的人文社会科学素养、社会责任感。	中国近现代史纲要、思想道德修养与法律基础、马克思主义基本原理概论、毛泽东思想与中国特色社会主义理论体系概论	课程平时考核； 期末考试
	8.2 能够具备良好的专业素质和职业道德和规范，履行责任。	思想道德修养与法律基础、军事理论及训练、大学生心理健康教育、大学生职业发展与就业指导、形势与政策	课程平时考核； 期末考试
9.个人和团队：能够在多学科背景下的团队中承担个体、团队成员以及负责人的角色。	9.1 能够在多学科背景下理解团队的意义，了解数字媒体技术相关领域项目团队的角色及职责。	数字媒体产品设计课程设计、综合程序设计课程设计、视频制作课程设计、第二课堂	课程平时考核； 期末考试
	9.2 具备组织、沟通、协调、服务等能力，能够在复杂项目实施过程中承担相关角色。	数字媒体产品设计课程设计、综合程序设计课程设计、视频制作课程设计、技术实习、毕业设计	课程平时考核； 期末考试
10.沟通：能够就数字媒体技术领域复杂工程问题与业界同行及社会公众进行有效沟通和交流，包括撰写报告和设计文稿、陈述发言、清晰表达或回应指令。并具备一定的国际视野，能够在跨文化背景下进行沟通和交流。	10.1 具有良好语言表达和文字组织能力，能够有效进行技术交流与沟通。	实验报告、课程设计报告、课程设计答辩、课堂研讨、技术实习、毕业设计	课程平时考核； 期末考试
	10.2 能够具备一定的国际视野，掌握一门外语，能够了解和跟踪数字媒体技术专业的最新发展趋势，具有跨文化交流和沟通能力。	大学英语、工程师英语、双语课程、科技英语	课程平时考核； 期末考试
	10.3 能够按照行业规范、国际标准进行技术文档撰写和交流。	企业课程、工程师英语、双语课程、科技英语	课程平时考核； 期末考试
11.项目管理：理解并掌握工程管理原理与经济决策方法，并能在多学科环境中应用。	11.1 能够理解和掌握复杂数字媒体技术相关领域工程项目管理原理和经济决策方法。	管理和经济类选修课、系统架构分析与设计	课程平时考核； 期末考试
	11.2 能够在多学科环境中根据复杂数字媒体技术相关领域工程项目特征选择恰当的项目管理方法和经济决策方法。	系统架构分析与设计、数字媒体产品设计课程设计、项目案例设计与开发实践、技术实习、毕业设计	课程平时考核； 期末考试
	11.3 能够选择恰当的数字媒体技术相关领域项目管理工具、工程模型，具备对复杂数字媒体技术相关领域工程项目进行项目管理的能力并进行实践。	系统架构分析与设计、项目案例设计与开发实践、技术实习、毕业设计	课程平时考核； 期末考试
12.终身学习：具有自主学习和	12.1 能够认识到自我探索和终身学习的必要性和重要性。	数字媒体技术导论、思政社会实践、认知实习	课程平时考核； 期末考试

终身学习的意识，有不断学习和适应发展的能力。	12.2 拥有健康的体质，能够养成主动学习习惯，运用科学的学习方法管理知识和处理信息，有不断学习和适应发展的能力。	体育、体质健康训练、专业高级技术拓展	课程平时考核； 期末考核
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#### 四、主干学科

计算机科学与技术

#### 五、专业核心课程

程序设计基础、数据结构与算法、数据库系统设计基础、艺术基础、数字媒体设计基础、专业物理与数学、HTML5程序设计、数字图像处理、三维图形学、多媒体网络、数字音视频编码、摄影摄像基础、视频制作原理与技术、互联网产品交互设计、系统架构分析与设计

#### 六、主要实践环节

军事理论及训练、思政社会实践、课程设计、科研实践、认识实习、技术实习、毕业设计

#### 七、学制、学位及毕业学分要求

1. 学制：4-8年
2. 授予学位：工学学士学位
3. 本专业毕业最低学分要求：175

#### 八、学分结构要求

课程设置及修读类型			学分及占比	
			学分	学分比例
理论教学环节（不含课内实验）	通识教育课	必修	53	30%
		选修	8	5%
	学科专业类基础课	必修	27.5	16%
	专业核心课（必修）		24	14%
	拓展复合课（选修）		17	10%
	小计		129.5	74%
	实践教学环节	必修	45.5	26%
合计			175	100%

# Undergraduate Program in Digital Media Technology

## I. Educational Objectives

Students of this Specialty are required to learn and master the basic theories and professional knowledge of 2D and 3D media oriented to the Internet, including digital graphics, images, audio and video, etc., and to acquire the fundamental design and software development techniques in the fields of computer, media and network. With digital media as its core, this specialty aims at teaching the knowledge and skills of demand analysis, interaction studies, visual design, system architecture, code development, product testing & product management and operation of Internet products, especially wireless mobile Internet products. Integrated with interaction and visual design according to human engineering, the above-mentioned trainings enable students to organically combine technological development and artistic design, and to create the most accessible Internet applications with the forefront Internet applications. It brings up applied engineering talents that can engage in various digital media application fields such as analysis, design, innovation, development, production and teaching etc..

## II. Graduation Requirements

1. Engineering knowledge: be able to solve problems in the field of digital media technology integrating mathematics, natural science, engineering and professional knowledge.
2. Problem analysis: can identify, express, and analyze complex problems in the field of digital media technology through literature research, and obtain effective conclusion by using the basic principles of mathematics, natural science, engineering science and art design.
3. Design / development solutions: to design solutions for problems in the field of digital media technology, and design digital media systems to meet the requirements of specific users, reflecting innovation and considering the factors of social, health, safety, law, culture and environment in the design process.
4. Research: be able to research complex problems in the field of digital media technology using scientific methods based on the principles of science, including experimental design, analysis & interpretation of data, and can draw reasonable conclusions through comprehensive information.
5. Usage of modern tools: be able to develop, select and use appropriate technologies, resources, modern engineering tools and information technology tools for complex problems in digital media technology.
6. Engineering and the society: be able to properly analyze and evaluate the influence of professional engineering practice and complex engineering solutions on social, health, safety, law & culture, and understand the responsibilities.
7. Environment and Sustainability: understand and evaluate the impact of professional engineering practices on environmental and social sustainable development in the context of complex digital media technology problems.
8. Professional norms: possess humanities science accomplishment, social responsibility, understand and abide by professional ethics & norms of engineering practice, and fulfill their responsibilities.
9. Individual and teamwork: be able to play individual, team member and responsible roles in a multidisciplinary team.
10. Communication: be able to communicate and exchange complex engineering problems with industry peers and the public in the field of digital media technology, including reporting, writing, presentation, statement and clearly expression and responding to instructions. Students should have international awareness for communication in a cross-cultural context.
11. Project management: understand and master engineering management principles and economic decision-making methods which can be applied to a multidisciplinary environment.
12. Lifelong learning: be equipped with independent learning & lifelong learning awareness and have the ability for continuous learn and the adaptability to technological updates

## III. Achievement Matrix of Graduation Requirements

Graduation Requirements	Indicators of Graduation Requirements	The Main Courses and Programs	Assessment
1. The engineering knowledge: be able to solve complex problems in the field of digital media technology using mathematics, natural science, engineering and	1.1 Master the knowledge of mathematics, physics that required in this specialty	Advanced Mathematics, College Physics, Linear Algebra, Probability Theory and Mathematical Statistics, Professional Mathematics & Physics	Regular Assessment; Final Exam
	1.2 Grasp the knowledge and skills of computer programming	Fundamentals of Programming , Data Structure, Database Design, Computer System, HTML5 Programming	Regular Assessment; Final Exam
	1.3 Have a certain artistic acknowledge and artistic design skills	Foundations of Art, Foundations of Digital Media Design, Color Constitution, Cartoon Design	Regular Assessment; Final Exam

science, engineering and professional knowledge.	1.4 Master the basic theories of graphic images, audio and video signal processing and network communication	Digital Image Processing, 3 Dimensional Graphics, Multimedia Network, Audio and Video Signal Processing	Regular Assessment; Final Exam
	1.5 Master the basic theories and methods of photography, digital video and animation making	Photography Technology, Video Making Theory and Technology, Two Dimensional Theory and Design, Three Dimensional Scene Design, Post Production of Digital Media	Regular Assessment; Final Exam
2. Problem analysis: able to apply the basic principles of mathematics, natural science, engineering science and art design in digital media problems. To recognize, express professional literatures, and use them in digital media problems, thus to obtain valid conclusions.	2.1 Have a good ability of making demand analysis , abstract and modeling of related problem in the process of developing digital media products.	Interaction Design of Internet Product, Data Structure, System Architecture Analysis and Design, Design Mode, Video Making Theory and Technology, Foundations of Game Design	Regular Assessment; Final Exam
	2.2 Have the ability of interactive design of digital media products, and describing related problem using engineering methods such as drafts and prototype.	Interaction Design of Internet Product, Foundations of art , Foundations of Digital Media Design, Visual Design of Mobile Products	Regular Assessment; Final Exam
	2.3 Using the Internet and other modern information technology methods to obtain information and professional literature to conduct study and analysis.	Extracurricular Teaching, Cognition practice, Graduate Project	Regular Assessment; Final Exam
3. Design/develop solutions: Students are able to design solutions for digital media problems, including designing and developing digital media systems to meet specific user requirements, which are able to consider social, health, safety, legal, cultural and environmental factors in the design process. Consciousness of innovation should also be reflected.	3.1 Have a good ability of design , development and management of digital media products.	Interaction Design of Internet Product, System Architecture Analysis and Design, Mobile Device Programming Design Mode, Course Design of Video Production, Post Production, Commerce Film	Regular Assessment; Final Exam
	3.2 Be able to put forward and design reasonable solutions for the demands related to specific complex issues in digital media domains, considering social, health, safety, legal, cultural and environmental factors in the design process.	Fundamentals of Morality and Law ,Interaction Design of Internet Product, System Architecture Analysis and Design, Foundations of Game Design ,Mobile Device Programming, Senior Professional Technology	Regular Assessment; Final Exam
	3.4 Have the attitude and consciousness of innovation, and can put forward new ideas and new solutions in the engineering practice.	Entrepreneurial Fundamental, Extracurricular Teaching	Regular Assessment; Final Exam
4. Research: Students are able to study complex digital media problems based on science principle and method, including experiments designing, data analysis and interpretation. Reasonable and effective conclusions should be made from the comprehensive information.	4.1 Master the method of feasibility analysis, requirement acquirement of digital media products as well as making conclusion and normalized description.	Interaction Design of Internet Product, Project Cases Practice, Graduate Project	Regular Assessment Final Exam
	4.2 Be able to design reasonable experiment and method to test or evaluate the requirements, system architecture, development and document of digital media products.	Interaction Design of Internet Product, Senior Professional Technology, Project Cases Practice	

5. The use of modern tools: be able to develop, select and use appropriate technology, resources and modern engineering tools and information technology based on complex digital media problems.	5.1 To master the various tools and methods used in design and development process of digital media products.	Fundamentals of Programming(Development Tool), Video Making Theory and Technology (Media Making Tool), Interaction Design of Internet Product (Demand Analysis, Prototype Design), Visual Design of Mobile Products (Interface Design Tool), Design Mode, Senior Professional Technology (Testing Tool) etc.	Regular Assessment; Final Exam
	5.2 To master a variety of development tools and technical resources and method features, making analysis, comparison and choices for specific digital media problems.	Program Design Basic, Course Design of Video Production, Interaction Design of Internet Product, Course Design of Digital Media Product Design, Project Cases Practice, Graduate Project	Regular Assessment; Final Exam
	5.3 To understand the development status, trends and advanced technology in the field of digital media.	Introduction of Digital Media Technology, Big Data and Cloud computing, Artificial Intelligence, Virtual reality and Digital entertainment, Senior Professional Technology	Regular Assessment; Final Exam
6. Engineering and society: Students can analyze and evaluate the influence of the specialty practice on society, healthy, safety, law and cultures, carrying on reasonable analysis based on the engineering background knowledge, and fulfill the corresponding responsibilities.	6.1 Master the relationships among people, computer, art and the society, so as to understand the influence of digital media practices upon society, health, safety, legal and cultural issues.	Fundamentals of Morality and Law, Introduction of Digital Media Technology, Senior Professional Technology	Regular Assessment Final Exam
	6.2 Understand and apply the digital media industry standards, international standards and laws and regulations to evaluate the digital media practice and its effects on the problems of social, health, safety, legal and culture, as well as taking corresponding responsibilities.	Fundamentals of Morality and Law, Situation and Policy, Introduction of Digital Media Technology, Network Information Safety	Regular Assessment Final Exam
7. The environment and sustainable development: Students should have the ability to understand and evaluate the influence on the environment and the social sustainable development when performing the complicated digital media practices.	7.1 Understand the principles, policies and laws of environmental protection and social sustainable development involved during digital media practices.	Fundamentals of Morality and Law, Introduction of Digital Media Technology, Multimedia Network, Network Information Safety, Situation and Policy	Regular Assessment Final Exam
	7.2 To Know and evaluate the impact of digital media practice on environment and social sustainable development.	Introduction of Digital Media Technology, Situation and Policy, Technology Practice、Graduate Project	Regular Assessment Final Exam
8. Professional morals: Students should have humanities and social science literacy, and can fulfill the corresponding social responsibilities Professional	8.1 Correct outlook on world, life and values should be established, as well as good accomplishment in the humanities and social sciences, and social responsibility.	Outline of Contemporary Chinese History ,Fundamentals of Morality and Law,Introduction to Fundamental Principles of Marxism, Introduction to Mao Zedong's Thought and Theoretical System of Socialism with Chinese Characteristics	Regular Assessment Final Exam

responsibility and professional ethics and norms should be abided in the engineering practice.	8.2 To have good professional quality and professional ethics, able to fulfill the responsibility.	Fundamentals of Morality and Law, Military Theory and Training ,Mental Health Education for College Students, Practice of career planning and guidance for college students, Situation and Policy	Regular Assessment Final Exam
9. Individual and team: Students can undertake different roles as individuals, team members, or team leaders in teams with multidisciplinary background.	9.1 Be able to understand the meaning of the team under multidisciplinary background, understand the role and their responsibility in project team related to digital media domain.	Course Design of Digital Media Product Design , Program Design Basic , Course Design of Video Production, Extracurricular Teaching	Regular Assessment Final Exam
	9.2 Be able to organize, communicate, coordinate and undertake related roles when implementation projects.	Course Design of Digital Media Product Design , Program Design Basic , Course Design of Video Production, Technology Practice,Graduate Project	Regular Assessment Final Exam
10. Communication: Students should have the ability to communicate effectively with the industry peers and the public communities on complex digital media problems, which including writing reports and design documents, making presentations, giving clear expressions or responses to orders. International vision is also required to communicate under cross-cultural situations.	10.1 Have good language expression and writing abilities to conduct effective technical exchange and communication.	The experiment reports, curriculum design reports, curriculum design defense, classroom discussion,Technology Practice, Graduate Project	Regular Assessment Final Exam
	10.2 Have international vision, master a foreign language, can understand and follow the latest development trend of digital media, and have inter-cultural communication and communication skills.	College English,Engineer English, Bilingual courses, Technical English	Regular Assessment Final Exam
	10.3 Can write technical documents and communication in accordance with the industry standards and international standards.	Business courses, Engineer English, Bilingual courses, Technical English	Regular Assessment Final Exam
11. Project management: Students have to understand and master the project engineering management principles and economic decision method, and apply them in multidisciplinary environment.	11.1 Be able to understand and master the principles of digital media project management and economic decision method.	Elective course in Management and Economics, System Architecture Analysis and Design	Regular Assessment Final Exam
	11.2 Can choose the appropriate project management methods and economic decision method in a multidisciplinary environment according to the characters of complex digital media project.	System Architecture Analysis and Design , Course Design of Digital Media Product Design , Project Cases Practice , Technology Practice, Graduate Project	Regular Assessment Final Exam
	11.3 Be able to select the appropriate project management tools, engineering model in the field of digital media, have the ability of project management.	System Architecture Analysis and Design , Project Cases Practice, Technology Practice, Graduate Project	Regular Assessment Final Exam
12. Lifelong learning: Students should have the consciousness of independent	12.1 Understand the importance and necessity of lifelong learning and self exploration	Introduction of Digital Media Technology, Ideological Social Practice,Cognition Practice	Regular Assessment Final Exam



learning and lifelong learning, and have the ability to learn constantly to catch up with the development.	12.2 Have a healthy body, and an active learning habit, use scientific method to manage knowledge and process information; Have the ability of constant learning to adapt the development.	Physical Education、fitness training、Senior Professional Technology	Regular Assessment Final Exam
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#### IV. Major Disciplines

Computer Science and Technology

#### V. Core Courses

Fundamentals of Programming, Data Structure and Algorithm Foundations, Fundamentals of Database design, Fundamentals of art, Foundations of Digital Media Design, Professional Physics and Mathematics, HTML5 Programming, Digital Image Processing, 3D Computer Graphics, Multimedia network, Audio and video signal processing, Photography Technology, Video Production Principle and Technology, Interaction Design for Internet Products, System Architecture Analysis and Design

#### VI. Internship and Practice

Military Theories and Training, Ideological Social Practice, Course Design, Scientific Research and Practice, Cognition Practice, Technological Practice and Graduation Design

#### VII. Duration of Schooling, Degree and Credits Requirements for Graduation

- Duration of Schooling: 4-8 years
- Degree Conferred: Bachelor of Engineering
- The Minimum Graduation Credits: 175 points

#### VIII. Credits Structure and Ratio

The curriculum Provision and Course Type			Credits	Credits Ratios
Theory Teaching	General Education Courses	Required	53	30%
		Optional	8	5%
	Discipline & Specialty Basic Courses	Required	27. 5	16%
	Specialized Core Courses（Required）		24	14%
	Expand and Recombination Courses （Optional）		17	10%
	Subtotal		129. 5	74%
Practice Teaching	Required		45. 5	26%
Total			175	100%

课程设置与学时安排（表一）

专业名称：数字媒体技术

课程类别	课程性质	课程代码	课程名称	学分	总学时	教学安排					考试学期	各学期周学时分配								备注
						理论学时	实验学时	习题学时	研讨学时	课外学时		第一学年		第二学年		第三学年		第四学年		
												长1	长2	长3	长4	长5	长6	长7	长8	
												16周	16周	16周	16周	16周	16周	16周	16周	
通识教育课程	思政类	2615A101	中国近现代史纲要 Outline of Contemporary Chinese History	3	48	32	16	2	4		1	2								
		2615A079	思想道德修养与法律基础 Fundamentals of Morality and Law	3	48	36	2	4	6		2		3							
		2615A080	马克思主义基本原理概论 Introduction to Fundamental Principles of Marxism	3	48	36	2	4	6		3			3						
		2615A102	毛泽东思想与中国特色社会主义理论体系概论 Introduction to Mao Zedong's Thought and Theoretical System of Socialism with Chinese Characteristics	3	48	32	16	4	8		4				4					
		26115201-26115204	形势与政策 Situation and Policy	2	32	32						长1-4讲座								
	外语类	5214A001-5214A002	大学英语2-3 College English 2-3	6	96	80		8	8	96	1-2	3	3							实施分级教学 2选1
		5214A002-5214A003	大学英语3-4 College English 3-4	6	96	80		8	8	96	1-2	3	3							
		5214A004-5214A005	工程师英语1-2 Engineer English 1-2	4	64	44		10	10	64	3-4				2	2				
	体育类	1316A007-1316A010	体育1-4 Physical Education 1-4	4	144		144				1-4	2	2	2	2					体育俱乐部形式
	数理基础类	1011A095-1011A096	高等数学A1-A2 Advanced Mathematics Level A1-A2	10	160	106		32	22	240	1,2	6	4							
		1011A107	线性代数B Linear Algebra B	2	32	24		4	4	32	3				2					
		1012A110-1012A111	大学物理B1-2 College Physics B1-2	5	80	48		20	12	80	2-3		3	2						
		1011A114	概率论与数理统计B Probability Theory and Mathmatical Statistics B	2	32	24		4	4	48	3				2					
	创业类	3717A039	创业基础 Entrepreneurial Fundamental	2	32	26			6	16		2								
	文化素质类	5115A087	大学语文 College Chinese	2	32	10	6	4	12			2								
	健康教育与就业指导	2717A122	大学生心理健康教育 Mental Health Education for College Students	1	16	8	4		4		1	2								
		31117082-31117083	大学生职业发展与就业指导1-2 Career Planning and Guidance for College Students 1-2	1	16	16									2		2			

课程设置与学时安排（表一）

专业名称：数字媒体技术

课程类别	课程性质	课程代码	课程名称	学分	总学时	教学安排					考试学期	各学期周学时分配								备注
						理论学时	实验实践	习题学时	研讨学时	课外学时		第一学年		第二学年		第三学年		第四学年		
												长1	长2	长3	长4	长5	长6	长7	长8	
												16周	16周	16周	16周	16周	16周	16周	16周	
	素质选修课	8个学分必修，课程选修	自然科学拓展及工程技术拓展之外的课程群至少选修6个学分	6	96	96														
			自然科学拓展及工程技术拓展课程群至少选修2个学分	2	32	32														
	通识教育类课程小计			61	1056	682	190	96	106	576		22	18	15	10	4	4	0	0	
学科专业基础课	必修	0221A009	计算机科学导论 Introduction to Computer Science	1.5	24	24				24		2								1-11周
		0224A015	面向对象程序设计 Object-Oriented Programming	3	48	24	20	4		48	3		3							
		0221A010	程序设计基础 Fundamentals of Programming	3	48	48				96	1	3								
		0224A003	艺术基础 Foundations of art	3	48	32	16			16			3							1-12周
		0224A004	数据库系统设计基础 Database Design	3	48	30	16		2	32	2			3						
		0224A005	数字媒体设计基础 Foundations of Digital Media	3	48	32	16			32			3							
		0224A006	数据结构与算法 Data Structure and Algorithm	3	48	28	16	4		48	3			3						
		0224A007	摄影摄像基础 Photography Technology	3	48	16	32			16				3						
		0224A016	计算数学 Computational Mathematics	3	48	20	18	5	5	48	3			3						
		0224A017	游戏中的数学和物理 Mathematics and Physics in Games	2	32	12	14	3	3	32	4				2					
	学科专业基础课小计			27.5	416	242	148	16	10	392		5	9	12	2	0	0	0	0	
专业核心课	必修	0234A001	HTML5程序设计 HTMLS5 Programming	3	48	30	16		2	48			3							
		0235A009	Web前端高级程序设计 Web Front-end Advanced Programming	3	48	24	16		8					3						
		0234A003	三维图形学 3D Computer Graphics	3	48	29	16		3	48	4				3					
		0234A004	多媒体网络 Multimedia Network	3	48	25	16	7		48	5					3				
		0234A005	数字图像处理 Digital Image Processing	3	48	26	16	6		48	5					3				
		0234A006	互联网产品交互设计 Interaction Design of Internet Product	3	48	24	16		8	48					3					
		0234A007	数字音视频编码 Digital Audio Video Encoding	3	48	26	16	3	3	48	6						3			
		0234A008	系统架构分析与设计 System Architecture Analysis and Design	3	48	24	16		8	48	6						3			
	专业核心课小计			24	384	208	128	16	32	336		0	3	3	6	6	6	0	0	

课程设置与学时安排（表一）

专业名称：数字媒体技术

课程类别	课程性质	课程代码	课程名称	学分	总学时	教学安排					考试学期	各学期周学时分配								备注	
						理论学时	实验实践	习题学时	研讨学时	课外学时		第一学年		第二学年		第三学年		第四学年			
												长1	长2	长3	长4	长5	长6	长7	长8		
												16周	16周	16周	16周	16周	16周	16周	16周		
拓展复合课	专业拓展	0244B001	色彩构成 Color Constitution	2	32	16	16			32				2						1-8周	
		0244B002	移动产品视觉设计 Visual Design of Mobile Products	3	48	30	16			2	48				3						
		0244B010	计算机系统 Computer System	3	48	26	16	3	3	48	3				3						
		0244B003	商业摄影 Commerce Film	2	32	8	24				32					2				1-8周	
		0244B004	二维动画原理与设计 Two-dimensional Animation Design	2	32	16	16				32					2					
		0244B005	动漫设计 Cartoon Design	2	32	16	16				32					3				9-16周	
		0244B015	设计模式 Design Mode	3	48	28	16			4	48						3				
		0244B011	移动设备程序设计（iOS） Mobile Device Programming（iOS）	3	48	29	16			3	48						3			2选1	
		0244B012	移动设备程序设计(Android) Mobile Device Programming (Android)	3	48	29	16			3	48						3				
		0244B006	数字媒体后期制作 Post Production of Digital Media	3	48	30	16				2	48						3			
		0244B007	三维场景设计 Three-dimensional Scene Design	3	48	30	16				2	48					3				
		0244B014	人工智能 Artificial Intelligence	2	32	12	16				4	32	5					3			
		0244B016	网络信息安全 Network Information Safety	3	48	22	16	4	6	48	6							3			
		0244B013	大数据与云计算 Big Data and Cloud Computing	2	32	12	16				4	32	6						3		
		0244B009	游戏设计与开发 Foundations of Game Design	3	48	29	16				3	48					3				
		0244B008	虚拟现实与数字娱乐 Virtual Reality and Digital Entertainment	3	48	26	16				6	48						3			
		0244B017 0244B018	专业高级技术拓展1-2 Senior Professional Technology1-2	6	96	32	32				32	96					3	3			两门为企业引进课程
		专业拓展课小计			48	768	391	296	7	74	768		0	0	8	10	18	15	3	0	
	专业拓展至少选修学分			12	192	128	97	0	15	240		0	0	2	5	6	3	0	0		
拓	专业复合	0244B021	数字电子技术 Digital Electronics Technology	2	32	26			6		32	3				2					
		0244B022	艺术鉴赏 Art Appreciation	2	32	26					6	32					2				
		0244B023	网络传播与文化 Network Broadcast and Culture	2	32	26					6	32					2				

课程设置与学时安排（表一）

专业名称：数字媒体技术

课程类别	课程性质	课程代码	课程名称	学分	总学时	教学安排					考试学期	各学期周学时分配								备注
						理论学时	实验学时	习题学时	研讨学时	课外学时		第一学年		第二学年		第三学年		第四学年		
												长1	长2	长3	长4	长5	长6	长7	长8	
												16周	16周	16周	16周	16周	16周	16周	16周	
展复合层次	（跨专业选修）	0244B024	电子商务 E-commerce	2	32	30			2	32	6						2			
		0244B025	科技英语 Technical English	2	32	30			2	32	6						2			
		0234A002	视频制作原理与技术 Video Production Principle &	3	48	30	16		2	48					3					1-12周
		小计			10	160	138	0	6	16	160		0	0	2	2	2	4	0	0
		专业复合至少选修学分			5	32	32	0	0	0			0	0	0	0	0	2	0	0
		专业拓展复合至少选修学分合计			17	272	160	97	0	15			0	0	2	5	6	5	0	0
		理论教学学分学时合计			129.5	2128	1292	563	128	163			27	30	32	23	16	15	0	0

实践教学安排（表二）

课程 代码	所属 模块	实践教学活 动名称	学 分	周 或 学 时	按学期分配（周或周学时）												备注
					第一学年			第二学年			第三学年			第四学年			
					长 1	长 2	短 1	长 3	长 4	短 2	长 5	长 6	短 3	长 7	长 8		
31461014	公共 实践	大学始业教育 Induction of University Life	1	1周	1周												
13461013		军事理论及训练 Military Theory and Training	4	4周	4周												
13461015		体质健康训练 Health Training	0.5	16							2						
31463007		思政社会实践 Ideological Social Practice	2	2周						2							
31467084		大学生职业发展与就业指导 实践 Practice of Career Planning and Guidance for College Students	1	22				22									
1012A022	基础 实验	大学物理实验B Physical Experiment of College B	1	33		3											
0261A216		程序设计基础实验 Experiments in Fundamentals of Programming	1	32	2												
0254A401	课程 设计	综合程序设计课程设 计 Program Design Basic	1	1				1									
0254A405		Web前端高级程序设 计 Course Design of Web Front-end Advanced Programming	1	1					1								
0254A403		互联网产品设计课程 设计 Course Design of Internet Product Design	1	1					1								
0254A404		项目案例设计与开 发实践 Project Cases Practice	2	64											6		
0254A101	专业 实践	认识实习 Cognition Practice	1	1						1							
0257A302		技术实习 Technology Practice	10	10										10			
0257A501		毕业设计（论 文） Graduate Project (Thesis)	16	16												16	
31462009	第二课堂 Extracurricular Teaching		3			3											
合计			45.5														



