

Computer Science

2017-2018
Academic Year



School of Liberal Arts

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GENERAL REQUIREMENTS FOR STUDENTS MATRICULATING IN ACADEMIC YEAR: 2017-2018

DEGREE: **COORDINATE MAJOR**

TOTAL CREDITS: 120

MAJOR: **COMPUTER SCIENCE**

MINIMUM CUMULATIVE GRADE POINT AVERAGE: 2.0

MINIMUM MAJOR GRADE POINT AVERAGE: 2.0

CORE CURRICULUM REQUIREMENTS			MAJOR REQUIREMENTS	CREDITS
Area	Credits	To Be Selected From	Required Freshman & Sophomore Courses:	
First Year Writing	4	ENGL 1010 or Equivalent	CMPS 1500 – Intro. to Computer Science I	
TIDES – 1 course in fall semester	1-1.5		CMPS 1600 – Intro. to Computer Science II	
Foreign Language – Competence at 1020-Level (1-2 courses depending on placement and language)	3-8	Arabic, Chinese, French, German, Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, or Spanish	CMPS 2170 – Discrete Mathematics (same as MATH 2170) CMPS 2200 – Intro. to Algorithms	
Cultural Knowledge – 1 Humanities 1 Fine Arts	6	Courses designated Humanities and Fine Arts	CMPS 2300 – Intro. to Systems and Networking	
Cultural Knowledge – Social Science	6	Courses designated Social Science	Spring of Sophomore Year – Meet with Undergraduate Coordinator in CS to declare coordinate major. In consultation with Undergraduate Coordinator, choose three CMPS courses at or above 3000-level. Students should declare their primary major before declaring coordinate major in CS.	
Quantitative Reasoning 2 Math courses	8	MATH 1210 and 1220 or equivalent	Junior Level Courses – Choose from: http://www2.tulane.edu/sse/cs/academics/undergraduate/junior- level.cfm should be listed	
Scientific Inquiry – 1 Lab Science 1 Science or Math	7-8	Courses from departments designated Science	Senior Level Courses – Choose from: http://www2.tulane.edu/sse/cs/academics/undergraduate/senior- level.cfm should be listed	
Writing Intensive	4	Consult Major	The Computer Science coordinate major requires students to complete a two-semester capstone project, CMPS 4010 and CMPS 4020.	
Public Service – 1 st Tier 2 nd Tier		1000-3000-Level 3000-Level or above	CRDV 1090 – Majors, Internships, and Jobs – (1 credit) <i>This course is not a requirement for this major! It is an option for students who are interested in career development.</i>	
Western Traditions	3	Refer to Undergraduate Core Curriculum Guide	<i>Through this course students develop the necessary tools, skills, and resources to become career ready, learning what it takes to be an excellent candidate in today's competitive job market. While taking CRDV 1090 students will create and refine professional documents, explore careers, conduct job/internship searches, develop networking and interviewing skills, and learn to utilize professional social media in order to network more effectively. Students will learn about the job/internship search process and know how to actively use this information in the real world. Students will have the unique opportunity to take personality and strength assessments in order to learn about their talents, interests, and preferred work environments. Students participate in a Mock Interview event with professionals from New Orleans.</i>	
Outside Western Traditions Or Comparative Cultures Intl. Perspectives	3	Refer to Undergraduate Core Curriculum Guide		

A Minor is not available for Computer Science.

- The Degree Plan and other information provided in this booklet serve only as advising tools. Newcomb-Tulane College advisors will help advise you on the core-curriculum, decide on a major, and consult on any academic success issues.
- Your major advisors will advise you on major requirements.
- Students with multiple majors will have more than one advisor and will need to consult with the appropriate advisor.
- Minors are not assigned an advisor, but a faculty member in the department is designated to advise minors.
- Become familiar with your major! By declaring early, you have access to a major advisor, are able to enroll in "majors only" classes, and are included in list serves that allow you to receive information about events, internships, and other opportunities.
- Pre-med and Pre-law students should also consult with one of the Pre-Professional advisors.

What Can I Do with a Major in... Computer Science

GENERAL INFORMATION

- Complete informational interviews with current computer science professionals to help establish career goals.
- Having related experience is critical to most employers that hire computer science majors. Obtain an internship, co-op, or part-time job in a relevant area to increase employability.
- Obtain vendor specific certifications or networking certifications to gain a competitive advantage.
- Develop strong interpersonal, communication, and other “soft skills.” Learn to work well on a team and to meet deadlines. Learn to communicate effectively with technical and non-technical colleagues.
- To maximize career options, supplement technical education with business coursework.
- Programming and consulting may go hand-in-hand. Many occupations in these areas have responsibilities that overlap.

SKILLS

- Computer knowledge
- Decision making skills
- Be able to analyze, compare, and interpret facts and figures quickly
- Critical thinking skills
- High proficiency in written/oral communications
- An aptitude for mathematics
- Analytical skills
- Ability to explain complex concepts/theories

CAREER AREAS

PROGRAMMING

- Systems
- Business Applications
- Warehousing
- Maintenance
- Scientific Applications
- Intelligence
- Information Delivery
- Project Management

EMPLOYERS

- Computer vendors
- Software and computer companies
- Any large corporation including:
- Banks, retail chains, manufacturers, universities, and government agencies
- Management consulting firms
- Contract and temporary employers
- Research laboratories

SYSTEMS DEVELOPMENT

- Analysis
- Design
- Support
- Quality Assurance
- Specialty Systems
- Database
- Client-Server
- Expert

- Banks and financial institutions
- Insurance companies
- Consulting firms
- Manufacturers
- Local, state and federal government
- Computer companies
- Research institutions

CONSULTING

- System installation
- System implementation
- Training

- Consulting Firms
- Self-employed

INTERNET

- Programming
- Software design
- Systems analysis
- Hardware production
- Web page design

- Network access points
- Backbone operators
- Online service providers
- Internet service providers
- Computer/equipment vendors
- Internet-related companies including browsers, search engines & Website design services
- Large businesses

If you think you might be interested in this major, but you are not absolutely sure, an exploratory advisor can help you explore major and career options, please go to:



If you are interested in information about Law Professions, please go to:



If you are interested in information about Health Professions, please go to:



What Can I Do with a Major in...

Computer Science

NETWORK TECHNOLOGY

- Installation and maintenance
- Administration

- Variety of organizations and industries

EDUCATION

- Teaching
- Instructional technology

- Public and private schools, K-12
- Colleges and universities

NON-TECHNICAL

- Customer/product support
- Technical writing
- Sales and marketing

- Software/hardware manufacturers
- Retail stores
- Software vendors

PROFESSIONAL ORGANIZATIONS

Association for Computing Machinery
www.acm.org

Association for Information Technology Professionals
www.aitp.org

Association for Women in Computing
www.awc-hq-org

Computer Professionals for Social Responsibility
www.cpsr.org

Independent Computer Consultants Association
www.icca.org

Network Professional Association
www.npanet.org

Society for Technical Communication
www.stc.org

Women in Technology
www.womenintechnology.org

RELATED WEBSITES & ASSOCIATIONS

Dice: The Career Hub for Tech
www.dice.com

Computer Jobs
www.computerjobs.com

Computer Work
www.computerwork.com

IT Jobs
www.itjobs.com

Tech Careers
www.techcareers.com

*For Jobs, internships, resume assistance,
interviews, and self-assessments, please
go to:*



*Tulane University is committed to your academic success
and provide several services to assist.*