

Computer Science/ Information Studies (BSCompSci/MSIS)

Our 21st century information age offers tremendous new opportunities for individuals who can master both cutting-edge technologies and human-centered design. However, obtaining such dual mastery is difficult to achieve under traditional educational programs, requiring students to pursue disjointed study in separate disciplines, with lack of integration extending time to graduation and requiring students to build the bridges between the technical and social sciences for themselves.

To address this growing need, the University of Texas at Austin's School of Information (iSchool) and the Department of Computer Science have teamed up to offer an innovative, integrated Bachelor of Science in Computer Science and Master of Science in Information Studies (BSCS/MSIS) program which provides a combined educational path toward obtaining the knowledge necessary to build the information tools of the future. We invite highly-motivated students with strong academic records to pursue this integrated program of study, with the unique opportunity to earn two university degrees in only five academic years: a Bachelor of Science in Computer Science in the fourth year and a Master of Science in Information Studies in the fifth year. This program is ideal for students who seek to combine knowledge of back-end, cutting-edge technologies with the front-end, human-centered design skills needed to create productive user experiences. Graduates of the joint program will be uniquely qualified for advanced placement in both the expanding job market and competitive Ph.D. programs in information and computer science.

This cross-disciplinary integrated program offers students a wide range of diverse course offerings, coupled with the flexibility to tailor their individual programs of study to focus on topics of greatest interest. The program culminates in a final capstone project challenging students to tackle open problems in research or professional practice, and often involving industry engagement. Course topics include (but are not limited to): human-computer interaction, user experience and usability design, information architecture, leadership and management, information policy, social-cultural studies, work practice studies, and organizational processes of governmental, corporate, and cultural-heritage institutions. Many other advanced topics are also offered on a rotating-basis (e.g., visualization, crowdsourcing, data mining, etc.).

Graduate Handbook

Graduate handbook information is updated and maintained by each program. Graduate handbooks are available within each program's office and [online](#). Please contact the program with concerns or questions.

Admission

Admission to the integrated Bachelor of Science in Computer Science and Master of Science in Information Studies (BSCS/MSIS) program is open only to undergraduate students within the Department of Computer Science at The University of Texas at Austin. It results in the awarding of a Bachelor of Science in Computer Science degree, followed by the Master of Science in Information Studies degree.

Total Hours Required: 150

Graduate: 30

Undergraduate: 120

Requirements

Each student develops a program of study that includes a substantial component in each of three areas of concentration: applicable mathematics, numerical analysis and scientific computation, and mathematical modeling for applications in a science or engineering discipline. The program must be reviewed and approved by the Graduate Studies Committee. Lists of courses in the three concentrations are available from the graduate advisor.

Plan of Study

The Plan of Study is a suggested four-year course sequence to support academic planning and serves as a helpful guide. Currently enrolled students should meet with their academic advisor to tailor their course selections and timelines to their individual goals and circumstances.

Course	Title	Hours
Year 1		
Semester 1		
C S 312	Introduction to Programming	3
M 408C or M 408N	Differential and Integral Calculus or Differential Calculus for Science	4
<u>U.S. History (060)</u>		3
<u>Social and Behavioral Sciences (080)</u>		3
<u>First-Year Signature Course (090)</u> approved by departmental advisor		3
Hours		16
Semester 2		
C S 311	Discrete Mathematics for Computer Science	3
C S 314	Data Structures	3
M 408D or M 408S	Sequences, Series, and Multivariable Calculus or Integral Calculus for Science	4
<u>U.S. History (060)</u>		3
RHE 306	Rhetoric and Writing	3
Hours		16
Year 2		
Semester 1		
C S 429	Computer Organization and Architecture	4
SDS 321 or M 362K	Introduction to Probability and Statistics or Probability I	3
GOV 310L	American and Texas Government	3
<u>Visual and Performing Arts (050)</u>		3
Hours		13
Semester 2		
C S 439	Principles of Computer Systems	4
Hours chosen from: Upper-division C S		3
M 340L	Matrices and Matrix Calculations	3
GOV 312L	Issues and Policies in American Government	3
Free Elective		3
Hours		16
Year 3		
Semester 1		
C S 331	Algorithms and Complexity	3
Hours chosen from: Upper-division C S		3
<u>Natural Science and Technology, Part I (030)</u>		3
<u>Foreign Language and Culture</u>		3
Free Elective		3
Hours		15
Semester 2		
Hours chosen from: Upper-division C S		3
Hours chosen from: Upper-division C S		3

Natural Science and Technology, Part I (030)	3
Foreign Language and Culture	3
Free Elective	3
Hours	15
Year 4	
Semester 1	
Hours chosen from: Upper-division C S	3
Hours chosen from: Upper-division C S	3
Math or Science course	3
Free Elective	3
Humanities (040)	3
Hours	15
Semester 2	
Hours chosen from: Upper-division C S	3
Hours chosen from: Upper-division C S	3
Free Elective	8
Hours	14
Year 5	
Semester 1	
Graduate	
Graduate Coursework	15
Hours	15
Semester 2	
Graduate	
Graduate Coursework	15
Hours	15
Total Hours	150

Requirements

All requirements are listed below, starting with the most specialized moving to the most general. Additional requirements may follow the table, so be sure to read the entire page. Some required courses listed below may also satisfy [General Education](#) requirements, including [Core Curriculum](#).

Code	Title	Hours
Concentration		
C S 312	Introduction to Programming	3
Hours chosen from: upper-division computer science		12
Hours chosen from:		3
Additional biology, chemistry, or physics sequence (see major requirements)		
GEO 303	Introduction to Geology	
	or GEO 301 Physical Geology	
Upper-division mathematics (excluding M X25K, M X40L, M X41, M X62K)		
<i>Subtotal</i>		<i>18</i>
Major (see details below)		49
<i>Subtotal</i>		<i>49</i>
Degree (see details below)		6
Free electives: Additional coursework to reach total hours required.		5
<i>Subtotal</i>		<i>11</i>
General Education		
Core Curriculum		42
Foreign Language other than English, Beginning Proficiency		
<i>Subtotal</i>		<i>42</i>
College Requirements - Natural Sciences		
General University Requirements		
Graduate		
INF 380E	Perspectives on Information	3

Hours chosen from:		3
INF 388L	Professional Experience and Project	
INF 388R	Practicum in School Libraries	
INF 698	Thesis	

Graduate Electives	24
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All students must also follow the requirements and policies below:

[Graduate Natural Sciences Requirements](#)

[Graduate University Requirements](#)

Total Hours	150
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Additional Requirements and Policy

Students must complete 18 hours of graduate elective coursework or 15 hours, if pursuing the two-semester thesis course option.

Of these electives, up to six hours of UT Austin graduate coursework offered outside of the iSchool may count toward the MS in Information Studies degree.

Some iSchool courses in technical topics overlap, at least partially, with competencies taught in undergraduate Computer Science courses. Therefore, the following courses may NOT be taken for graduate credit in the Integrated Degree program:

- INF 380D - Designing Dynamic Web Pages
- INF 380K - Internet Applications
- INF 380P - Introduction to Programming
- INF 385M - Database Management
- Other INF courses as determined by the iSchool faculty
- Undergraduate courses in Computer Science
- Courses that have already been applied toward another graduate or undergraduate degree program