# MASTER OF SCIENCE IN COMPUTER SCIENCE

## **About the MSCS Program**

Judson's Master of Science in Computer Science program offers unique flexibility for the modern student looking to grow and thrive within the rapidly evolving field of technology. Infused with interactive learning experiences and rooted in Christian values, the program fosters a unique synergy of technical prowess and ethical consciousness.

#### **Graduate Outcomes**

# **Graduates of the Master of Science in Computer Science program will...**

- Develop advanced technical knowledge and skills in computer science
- · Foster research and innovation in computer science
- · Enhance their problem-solving and critical thinking abilities
- · Cultivate effective communication and presentation skills
- · Foster collaboration and teamwork in interdisciplinary settings
- · Develop expertise in specialized areas of computer science
- Promote ethical and responsible computing practices
- Become prepared for leadership and professional roles in computer science

### **MSCS Student Handbook**

Details of the above and other program policies and procedures are outlined in the MSCS Student Handbook (https://myjudson.judsonu.edu/ICS/Portlets/ICS/Handoutportlet/viewhandler.ashx?handout\_id=5e8786bc-0aca-4d31-a5d8-6fcdfeda8a65), which may be accessed through the MyJudson student portal, on the Student Life page.

## **Important Notes**

- A minimum cumulative GPA of 3.0 is required. Students may be required to retake courses with grades of C or lower to maintain the GPA.
- Students must be approved by the Program Director of the doctoral Computer Science Program and the faculty for graduation.

Code	Title	Hours			
DCS502 Data St	ructures and Algorithms	3			
DCS503	Computer Architecture	3			
DCS545	Al Ethics and Responsible Al	3			
DCS512 Integrat	ed Systems	3			
DCS540 Deep Le	earning/Neural Networks	3			
DCS550	Information Technology Project Management	t 3			
DCS560 Network	k Security	3			
DCS620 Softwar	re Engineering	3			
Major Electives					
Complete a tota	of 12 credits from the courses below	12			
DCS530	Design Thinking for Data Visualization				
DCS532	Big Data Technologies and Tools				
DCS535	Advanced Data Analytics				
DCS570	Innovation and Entrepreneurship				

Total Hours		36
DCS691	Practical Professional Leadershp <sup>1</sup>	
DCS606	Emerging and Disruptive Tech	

This course is required for students with CPT authorization. It may be taken once each semester the student is enrolled.

Academic planning is the student's responsibility. This Graduation Plan is designed to be a guide to assist students as they plan their course selections. This is only a suggested schedule, and is not a substitute for a student's Degree Audit, nor the Program Requirements in the Judson University Catalog. Actual course selections should be made with the advice and approval of an academic advisor. Students should become familiar with the catalog in effect at the time at which they entered the institution.

Course	Title	Hours
First Year		
First Semester		
DCS550	Information Technology Project Management	3
DCS606	Emerging and Disruptive Tech	3
DCS620	Software Engineering	3
DCS691	Practical Professional Leadershp <sup>1</sup>	1
	Hours	10
Second Semester		
DCS545	Al Ethics and Responsible Al	3
DCS503	Computer Architecture	3
DCS691	Practical Professional Leadershp	1
Any Elective		3
	Hours	10
Third Semester		
DCS502		
DCS512		
DCS691	Practical Professional Leadershp	1
Any Elective		3
	Hours	4
Second Year		
First Semester		
DCS540		
DCS560		
DCS691	Practical Professional Leadershp	1
Any Elective		3
	Hours	4
	Total Hours	28

DCS691 Practical Professional Leadershp (1 c.h.) is required for students with CPT authorization. If taken for 3 semesters, it may replace 1 elective course.