

# ARTIFICIAL INTELLIGENCE MINOR

The Minor in Artificial Intelligence (AI) at Tulane University provides students with both the core algorithmic and computer science foundations as well as expertise in the rapidly advancing field of Artificial Intelligence, preparing them for jobs in this industry, as well as for advanced academic training in graduate programs.

More info about the Department of Computer Science and the program is available on the department webpage.

# Requirements

The Minor in Artificial Intelligence (AI) comprises of 5 courses, requiring 16 credits.

Course ID	Title	Credits
Algorithms		4
CMPS 2200	Intro to Algorithms	4
AI/ML Foundations		6
CMPS 3140	Intro Artificial Intelligence	3
CMPS 3240	Intro to Machine Learning	3
AI/ML Electives (choose two)		6
CMPS 3160	Introduction to Data Science	
CMPS 3340	Introduction to Deep Learning	
CMPS 3360	Data Visualization	
CMPS 3370	Digital Image Processing	
CMPS 4150	Multi-agent Systems	
CMPS 4330	Human-Computer Interaction	
CMPS 4730	Natural Language Processing	
CMPS 4740	Reinforcement Learning	
CMPS 4830	Computer Vision	
EENS 3600	Climate Data and Analysis	
ENGP 3730	Signals and Systems	
CENG 4680	Data Science and Machine Learning for Scientific Research	

### **Academic Prerequisites**

- CMPS 1500 Intro to CS I (4 c.h.) or CMPS 1100 Foundations of Programming (3 c.h.)
- CMPS 1600 Intro to CS II (4 c.h.)
- · CMPS/MATH 2170 Discrete Math (3 c.h.)

The program is open to all students willing to put time and work into becoming computing professionals. Students must complete the three prerequisite courses before declaring the minor. The prerequisite and minor sequence does not assume that students have any previous computer science background. Many of our students have never programmed a computer before joining their first computer science class. The department holds several hours of help sessions most days of the week to support students as they have questions while working through computer science homework.

#### **Academic Requirements**

To graduate with the Minor in Artificial Intelligence, students must achieve a cumulative GPA of 2.5 or above in the five courses that are required for the minor.

### **Timeline to Complete the Minor**

The Minor in Artificial Intelligence can be accomplished in a minimum of 5 semesters. This accounts for the time it takes to complete the prerequisites.

#### **Earning the Minor for CS Majors**

Students may receive the BS in Computer Science or the Coordinate Major in Computer Science along with the Minor in Artificial Intelligence.

University rules state that only one course may overlap in these cases (CMPS 2200, Intro to Algorithms). Students wishing to complete a CS Major and this Minor in AI both would be required to take 4 (12 CR) extra non-overlapping courses, bringing the total course for the BS in CS, e.g., to 70 CR. Note



that for students pursuing the BS in Computer Science, this means that they may not fulfill the Al/Algorithms requirement using any course which they use to fulfill the requirements of the Minor in Al.

#### **Declaring the Minor in Artificial Intelligence**

To declare the minor in computer science, please complete and sign the minor declaration form and email it to Ms. Debbie Ramil (dramil1@tulane.edu), who will assign you a faculty advisor, obtain the corresponding advisor's and the departmental chair's signatures for your form, and return the form to you. The completed form needs to be submitted to the Advising Office. When the minor declaration form is processed, you will be added to the CS students mailing list. In order to enhance your CS education, you may also wish to join computing-focused student organizations, such as Cookies and Code, Women in Technology, and Girls Who Code. Their info is on WaveSync.

Field of Study: CSAI

## **Contact**

For more information, contact the School of Science and Engineering (https://sse.tulane.edu/contact-us/).