Computer Science (BS)
College of Sciences

Online Orientation
Program Information Meeting
MODULE 1: WELCOME
In the College of Sciences:

• **You learn** from faculty who are committed to quality teaching, engrossed in relevant research yet accessible to students.

• **You learn** alongside committed students about the world of science, all preparing for exciting professional futures.

**COME & EXPLORE WITH US!**

These foundational problem solving skills will serve you well, no matter what life and career choices you make. We welcome you to the College of Sciences and we invite you to follow your curiosity.
Learning Outcomes

• Gain an understanding of College of Sciences;
• Understand what academic advising is;
• Obtain an overview of your intended major;
• Become aware of transfer process and policies;
• Gain insights on registration & academic planning.
Role of an Advisor

Academic advisors are available to help students with questions or issues while they progress through their degree program. Academic advisors can assist with:

- Course/registration questions,
- Petitions, appeals, exceptions, etc.,
- Graduation planning,
- Resources and referrals,
- Exploring enrichment and engagement opportunities, and
- Other concerns.
Who Is My Advisor?

Advisor: Wang, Ping
(651) 793-1347
Ping.Wang@metrostate.edu
Classification: No Data Available

Student Holds: 0006-Assessment Test
Student Holds: 0013-Did Not Attend Orientation
Advising Relationship

Communication is key to the success of a meaningful professional relationship

- Reach out to your advisor as soon as possible
- Help your advisor know you as a whole person, from your interest, skills to your life goals

You and your advisor share the same goal: your success!
Advisor Contact Information

College of Sciences Advising Center
651 793 1439
Advising Center website link

Birtukan Abebe Academic advisor birtukan.abebe@metrostate.edu
Pauline Danforth Academic advisor pauline.danforth@metrostate.edu
Ping Wang Academic Advisor ping.wang@metrostate.edu
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<td>BS, Computer Information Technology</td>
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<td>BAS, Computer Application Development</td>
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Majors, Minors & Department Overview

**Mathematics** 651-793-1439  
**Information & Computer Sciences** 651-793-1471  
**Natural Sciences** 651-793-1439
Why Choose a STEM Major?

The College of Sciences is created in response to the needs of job market demand for science, technology, engineering and mathematics (STEM) workers.

- STEM occupations: grow by 17% from 2008 to 2018; others 9.8%
- STEM workers:
  - Earn 26% higher,
  - College degrees required,
  - Unemployment rate is half of the national average

U.S. Department of Commerce, Economics and Statistics Administration
Characteristics of STEM Majors

- Mathematics: solid foundation in College Algebra is required for progression;

- Sequential course work: the learning of science and mathematics is a structured process, nearly all major courses have prerequisites;

- Each major has its own residency and upper division requirements in addition to the university-wide residency requirement;

- Major admission: science students are in pre-major status until:
  - Major prerequisites are completed
  - Undergraduate Program Declaration form is submitted by the student
  - GPA requirements are met – each major has its own requirement
Computer Science Major Background

Computer science is the study of systematic approaches for the design and development of application systems that support the functioning of core industries and services and the theory that underpins these techniques. The theoretical issues range from algorithms and data structures that can be readily applied to develop programs to far more abstract questions such as what is computable and the fundamental questions regarding computing efficiency. The field also studies the software and hardware approaches for the design of computer systems.

Major courses consist of Major Prerequisites, Major Core, and Major Electives.
Major Prerequisites:

Completion of major prerequisites:

- Two writing courses
- Math 120 Pre-calculus
- Math 215 Discrete mathematics
- Math 210 Calculus I or Math208 Applied Calculus
- ICS 140 Programing Fundamentals
- ICS 141 Programing with Objects
- ICS 240 Introduction to Data Structures

GPA requirements

- a cumulative GPA of at least 2.5 for ICS 141, ICS 240, MATH 215; and
- a grade of C- or better in all pre-major courses; and
- an overall GPA no lower than 2.0
Computer Science Major Declaration eForm

Undergraduate Program Declaration eForm

Star ID Authentication

To view and complete this eForm you must log in with your Star ID credentials. If you do not know your Star ID credentials please contact your school's help desk.

- Star ID:
- Star ID Password:

Verify Credentials

This eForm can be accessed:

- www.metrostate.edu
- Student Services/ Academic Advising/Declare Your Program
- College of Sciences eForm

https://inoweform.campus.mnsu.edu/imagenowforms/webform/d49670af-70bb-4f04-a04d-dabd2fbeedcb/
Core Requirements

Completion of the following with a minimum of C- grade:

- ICS 232: Computer Organization and Architecture
- ICS 311: Database Management Systems
- ICS 340: Data Structures
- ICS 365: Organization of Programming Languages
- ICS 372: Object-Oriented Design and Implementation
- ICS 440: Parallel and Distributed algorithms
- ICS 460: Networks and Security
- ICS 462: Operating Systems
- ICS 499: Software Engineering and Capstone Project
Major Electives

Option 1: 8 Credits Electives:
• View Major Checklist or DARS for details

Option 2: Choose a Minor
▪ Minor in a field with advisor’s approval
▪ Students with previous Bachelor’s degree, depending on the subject, may count as an approved minor.
Transfer Coursework
Transfer Coursework

DARS shows how your coursework transferred to meet the following requirements:
- General Education/Liberal Studies
- Credits completed towards graduation
- Total credits accepted for transfer
- Upper-division credits
- Residency credits needed from Metro

Major Checklist:
- Upon admission to pre-computer forensics status, you receive a Program Checklist outlining what you need to do for admission into the major
- DARS should accurately reflect such evaluation
Transfer Coursework: Credits While at Metro

This form is needed for getting following credits added to total transfer credits if you:

- had courses in progress when first admitted; or
- take courses from another accredited school while attending Metro State
Registration at Two Schools for Financial Aid

Consortium Agreement is required if you are on financial aid and taking a courses from another MnSCU institution. This form is in your Eservices under Financial Aid.
First Term Registration Tips

- Thoroughly understand your DARS: instruction available @AskUs
- Holds – check your DARS for holds that prevent you from registering
- Register for math course according to assessment score or continue your math sequence
- Read the notes section of the Class Schedule for prerequisite information
- Get onto the waitlist if the class you want is full
- Check to see if you have met the Upper Division Liberal Studies requirement:
  http://www.metrostate.edu/assets/Documents/academic-document-assets/GELS.pdf
- Start Major Prerequisites if you are ready
- Talk with your advisor about Major Courses
A freshman is a student with 16 credits or less.
Note: On-Campus Group Advising is required of all freshmen.

Registration requirements:
• METR 101, 3 cr. Your Academic Journey
• Writing or/and Math, based on placement scores
  ▪ Individual appointment with advisor
Suggestions for Transfer Students

- Complete required assessments and orientation ASAP
- Follow instructions sent by Information and Computer Science Department
- Meet your advisor

Special note to students with Associate Arts degree yet have not completed College Algebra: though there is no “Assessment Hold” on your record, it’s vital you do assessment as the registration of Math115, 208, 210 is linked to your assessment scores within the last 3-years.
Registration Tips.....
Log into eService and Check

- Know when your Registration Window opens; 
  http://metro-gateway.custhelp.com/app/answers/detail/a_id/892/kw/registration%20window
- Register as soon as your Registration Window opens;
- Two weeks before your Registration Window opens:
  - Resolve issues related to “holds” on your record;
  - Clarify requirements with advisor;
  - Understand financial aid processes.
In Conclusion

- The College of Sciences is committed to the success of each student, academically and professionally.
- Contact your advisor if you have further questions.
Thank you for choosing the College of Sciences. We look forward to exploring the world of knowledge, gaining skills along side with you!