CS Advising and QA

Hayes 111: October 18, 2023 (Wednesday) 4:30 PM – 5:30 PM
Hayes 108: October 19, 2023 (Thursday) 5:30 PM – 6:30 PM
Computer Science Faculty and Staff

Dr. JK Jake Lee, Dept. Chair
Prof. Jadwiga Carlson
Prof. Ronald Conway
Dr. Venu Dasigi
Dr. Michael Decker
Dr. Rob Green
Dr. Abbas Heydarnoori

Dr. Ray Kresman
Dr. Ray Kresman
Dr. Ruinian Li
Dr. Shuteng Niu
Dr. Hassan Rajaei
Dr. Sankardas Roy
Dr. Tianyi (Tina) Song
Dr. Yan Wu

Senior Secretary: Ms. Eva Crimmins
Systems Administrator: Ms. Lisa Weihl
General Advising Information

- **Advisors, Mentors, and Other Roles**
  - A&S College Advisors - 253 Central Hall, 419-372-8943
  - Department Faculty Mentors:
    - Dr. Decker (A-F), Prof. Conway (G-N), Dr. Song (O-Z)
    - Pre-Major (Pre-CS/Pre-SE): Dr. Kresman
  - Department Internship Coordinator: Dr. Rajaei
  - Department Undergraduate Coordinator: Dr. Dasigi
  - Department Chair: Dr. Lee
Degree, Major, Specialization, Etc.

- **Degree / Major**
  - B.S. in Computer Science
  - B.A. in Computer Science
  - B.S. in Software Engineering

- **Specializations**
  - Business Systems (BS/BA in CS)
  - Digital Forensics (BS/BA in CS)
  - Computational Data Science (BS in CS)

- **REMEMBER**: Degree Requirements might vary by year
  - Check sheets
  - Course prerequisites or co-requisites: course maps or course descriptions
Important General Reminders

- MATH1220 → MATH1280, CS2010
- MATH1280 → MATH1340, MATH2220; MATH1280-co → CS2020
- MATH1340 → MATH1350 → MATH2470; MATH2220 → CS3350, CS 4120
- CS2010 → CS2020, CS2190; CS2020 → CS3350, CS 3210; CS 3350 → CS 4770*
- CS 2020 & CS2190 → CS3080, CS 3320; CS3350 → CS4120; CS3080 → CS4390
- CS 2020 → SE 3540 → SE 4550 & SE 4560 → SE 4770**
- CS 2020 → CS 4620 → SE 4770**
- CS 3320 & CS 3080-co → CS 4320; CS 3320 & (CS 3080/CS 4390-co) → CS 4330
- *CS 3350 + 4 more CS/SE 3000-level or higher → CS 4370
- **SE 4550 + SE 4560 + CS 4620 → SE 4770
- Courses at the end of long (4-semester) sequences highlighted above
Tips to Keep in Mind

- Take CS 2010, CS 2020, and CS 3350 ASAP and consecutively: Fall, Spring, Fall or Summer, Fall, Spring
- Take CS 2190 ASAP after CS 2010 if at all possible.
- We try to offer required courses every Fall and Spring.
- **There is at least 1, but up to 4 four-semester chains in our degree programs (see specific courses below)!!**
  - 1 in BACS (CS 4390), 2 in BSSE (CS 4390, SE 4770*), 3 in BSCS (CS 4390, CS 4770, CS 4120), 4 in BSCS-DFS (CS 4390, CS 4770, CS 4120, CS 4330)

*Actually SE 4770 involves a FIVE-semester chain!*
Legacy Matters

For students who are on a catalog from before Fall 2020:
- The old CS 4540 (Software Engineering Project) has been replaced by the Capstone Experience course: CS 4770 for BSCS/BACS and SE 4770 for BSSE.
- NOBODY may receive credit for more than one of CS 4540, CS 4770, and SE 4770.

For students who are on a catalog from before Fall 2018:
- If you have not taken CS 2170, take CS 2190 instead & request a sub.
- If you have not taken CS 3270, take CS 3080 instead & request a sub.
- The prefix for CS 3540, CS 4550, and CS 4560 has changed to SE, so they will now be under Software Engineering (SE).
- If you took CS 3270 and are now under a catalog that requires CS 3080 or 4390, you CANNOT get credit for 3080 NOR 4390!
  - Ask me for substitutions for CS 3080 and for CS 4390.
Some SAMPLE Program Plans

We can go over some if there is interest & time.

If not, you can find the links at the bottom of:

https://www.bgsu.edu/arts-and-sciences/computer-science/undergraduate/bachelor-of-science-degree.html
https://www.bgsu.edu/arts-and-sciences/computer-science/undergraduate/bachelor-of-arts.html
https://www.bgsu.edu/arts-and-sciences/computer-science/undergraduate/bachelor-of-science-se-degree.html
Degree Audit

- DASD (Degree Audit and Schedule Designer)
  - Computer-generated document that checks your various degree requirements
Degree Audit - MyBGSU
Degree Audit - Request Audit

Request an Audit

Select A Program

- Run Current Programs:

<table>
<thead>
<tr>
<th>School</th>
<th>Degree Program</th>
<th>Title</th>
<th>Catalog Year</th>
<th>Marker</th>
<th>Value</th>
<th>Type</th>
<th>CATLYT</th>
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<td>SOFTENG</td>
<td>COLLEGE OF ARTS AND SCIENCES: BACHELOR OF SCIENCE</td>
<td></td>
<td>Spring 2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Run Selected Program:

Choosing a degree program here will not change your declared degree program.

School
- Undergraduate Programs $
Degree Audit - Audit Results

--- At least one requirement has not been satisfied ---

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THIS AUDIT IS BEING PROVIDED TO ASSIST YOU IN MAKING REGISTRATION DECISIONS. FOR SPECIFIC REGISTRATION INFORMATION, PLEASE ACCESS THE SCHEDULE OF CLASSES ON-LINE AT: https://webapp.bgsu.edu/ClassSearch/search.htm

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* Please review your audit and report any discrepancies *
* as well as any questions and concerns to your faculty *
* advisor or college office at 419-372-2015. *

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# Degree Audit – Course Requirements

## List of Courses in Progress (REG)

**Earned:** 12.00 Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Grade</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 3800</td>
<td>3.00</td>
<td></td>
<td>REG</td>
</tr>
<tr>
<td>CS 4820</td>
<td>3.00</td>
<td></td>
<td>REG</td>
</tr>
<tr>
<td>HNRS4980</td>
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<td></td>
<td>REG</td>
</tr>
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<td>MDIA3520</td>
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<td></td>
<td>REG</td>
</tr>
<tr>
<td>PEG 2810</td>
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<td></td>
<td>REG</td>
</tr>
<tr>
<td>PEG 2910</td>
<td>1.00</td>
<td></td>
<td>REG</td>
</tr>
</tbody>
</table>

## Major Requirements (CS Major)

**Major Courses May Not Be Taken S/U**

1. **Required Courses - Completed**
   - CS 2010 3.00 A
   - CS 2020 3.00 A
   - CS 2170 3.00 A
   - CS 3000 3.00 A
   - CS 2900 1.00 S
   - CS 3270 3.00 C
   - CS 3060 3.00 B
   - CS 3940 3.00 A
   - CS 3350 3.00 B
   - CS 4120 3.00 A

2. **Practicum in Computer Science - Take 3 Hours**
   - CS 3300 3.00 S
Degree Audit – Additional Requirements

**ADDITIONAL MAJOR REQUIREMENTS (CS OTHER2)**
*MAJOR COURSES MAY NOT BE TAKEN S/U*

**Earned:** 27.00 Hours  
**Needs:** 3.00 Hours

1. **CALCULUS - COMPLETED**  
   SP15 MATH1310  
   5.00 A

2. **ADDITIONAL MATHEMATICS - COMPLETED**  
   SP16 MATH2220  
   3.00 A

3. **FUNDAMENTAL-STATISTICS - COMPLETED**  
   FA16 STAT2110  
   3.00 B  
   Processed As: BA 2110  
   SP17 STAT2120  
   3.00 A  
   Processed As: BA 2120

4. **ADDITIONAL MATH - COMPLETED**  
   FA15 MATH2320  
   5.00 B

5. **ARTS AND SCIENCES LAB SCIENCE SEQUENCE - COMPLETED**  
   FA16 BIOL2040H  
   4.00 B  
   SP17 BIOL2050H  
   4.00 B

6. **ADDITIONAL ARTS AND SCIENCES MATH AND NATURAL SCIENCES COURSES TO MEET 30-HOUR REQUIREMENT**

**MATH COURSE MUST BE BEYOND CALCULUS**

*Select From:*

- MATH 2320
- MATH 2330
- MATH 2340
- MATH 2350
- MATH 2470
- MATH 3130
- MATH 3280
- MATH 3320
- MATH 3370
- MATH 3390
- MATH 3410
- MATH 3420
- MATH 4010
- MATH 4020
- MATH 4030
- MATH 4040
- MATH 4110
- MATH 4140
- MATH 4210
- MATH 4250
- MATH 4260
- MATH 4270
- MATH 4320
- MATH 4340
- MATH 4370
- MATH 4390
- MATH 4410
- MATH 4420
- MATH 4450
- MATH 4470
- MATH 4510
- MATH 4520
- MATH 4610
- MATH 4680
- MATH 4682

**ADDITIONAL SCIENCE**
Internships

- Required for BSCS and BSSE
- Why would I want to do this?
- What Companies? Where?
- How do I get one?
- How many internships should I do?
- When should I do them?
- CS 2900 and CS 3900
- Department Internship Coordinator: Dr. Rajaei/Dr. Lee
- Department Internship Policies & Procedures
Where to Find Support

- Professor Office Hours (*listed on syllabus, Canvas*)
- College Academic Advisor (*name in MyBGSU/Navigate*)
- Department Faculty Mentor (*name in MyBGSU/Navigate*)
- Undergraduate Coordinator & Department Chair (*CS Department, Office Hours*)
- Student groups (*ACM & ACM-W Student Chapters*)
- Learning Commons
- Counseling Center and Accessibility Services
- DASD (Degree Audit and Schedule Designer)
Summer Courses

Summer 2024 Session 1 (First 6 weeks)

1. CS 1000, online: Tianyi Song
2. CS 1010, online: Ron Conway
3. CS 2010, online: Ron Conway
4. CS 2190, online: Tianyi Song
5. CS 5010, online: Ruinian Li
6. CS 6010, online: Ray Kresman

Summer 2024 Session 2 (Second 6 weeks)

1. CS 2020, online: Jadwiga Carlson
2. CS 2900 (2 cr. hr.), REMOTE, Tu,Th, 4:30PM: Venu Dasigi
3. CS 3000, online: Venu Dasigi
4. CS 3160, online: Jadwiga Carlson
5. CS 4/5630, online: Ray Kresman
6. CS 5015, online: Rob Green
7. CS 6800, online: Hassan Rajaei (Edge Computing)
The Accelerated MSCS Option

- Admissions Requirements
  - By the start of the student’s Accelerated status, they must have either:
    - 75 credit hours earned and an overall BGSU GPA of at least 3.2, or
    - 90 credit hours earned and an overall BGSU GPA of at least 3.0;
  - A completed Accelerated Bachelor’s to Master’s Program Application;
  - Official transcripts from all universities attended;
  - At least one letter of recommendation from a full-time BGSU faculty member

- Program Plan
  - Undergraduate Accelerated Status (limited to 9 credits maximum)
    - Any 5000 level CS course whose 4000 level version counts towards requirements for the BA/BS.
  - Graduate Accelerated Status

https://www.bgsu.edu/graduate/graduate-programs/accelerated-bachelors-to-masters-programs/accelerated-ba-bs-to-ms-in-computer-science-program-policy
Questions?
Some Sequencing Options for BSCS

- Take CS 2010, CS 2020, and CS 3350 ASAP and consecutively:
  - Fall, Spring, Fall or maybe: Summer, Fall, Spring

- An aggressive 4-semester option (4 MATH/CS courses once):
  \[(CS \ 2010 + MATH \ 1280) \rightarrow (CS \ 2020 + CS\ 2190 + MATH\ 2220 + MATH\ 1340) \rightarrow (CS\ 3350 + CS\ 3080 + MATH\ 1350) \rightarrow (CS\ 4120 + CS\ 4390 + CS\ 4770 + MATH\ 2470)\]

- A 5-semester options (3 MATH/CS courses twice):
  \[(CS\ 2010 + MATH\ 1280) \rightarrow (CS\ 2020 + CS\ 2190 + MATH\ 2220) \rightarrow (CS\ 3350 + CS\ 3080 + MATH\ 1340) \rightarrow (CS\ 4120 / CS\ 4390 + MATH\ 1350) + (CS\ 4390 / CS\ 4120 + CS\ 4770 + MATH\ 2470)\]
More Sequencing Options (Continued)

- Another 5-semester option (3 MATH/CS courses twice):
  - (CS 2010 + MATH 1280) → (CS 2020 + CS 2190 + MATH 2220) → (CS 3350 + MATH 1340) → (CS 4120 + CS 3080 + MATH 1350) + (CS 4390 + CS 4770 + MATH 2470)

- A 6-semester option (2 MATH/CS courses):
  - (CS 2010 + MATH 1280) → (CS 2020 + MATH 2220) → (CS 2190 + CS 3350) → (CS 3080 + MATH 1340) → (CS 4120/4390 + MATH 1350) + (CS 4390/4120 + CS 4770 + MATH 2470)

- You need to take CS 2900 preferably before the first summer and strive to take CS 3900 during the second/third summer; take CS 4770 ASAP after the prerequisites are met.