

Welcome to the

Computer Science Major Bioinformatics Emphasis

in the College of Computational, Mathematical, and Physical Sciences

College Advisement Center

Website: <https://science.byu.edu/advisement>
Email: cmsadvising@byu.edu
Phone: 801-422-2674
Office: N-181 ESC

Computer Science Department

Website: cs.byu.edu
Email: cs-office@byu.edu
Phone: 801-422-3027
Office: 3361 TMCB

Undergraduate Department Advisor (A-J) – Yannick Fitu

Email: yfitu@cs.byu.edu
Phone: 801-422-8602
Office: 2245 TMCB

Undergraduate Department Advisor (K-Z) – Lynnette Nelson

Email: lnelson@cs.byu.edu
Phone: 801-422-9439
Office: 2250 TMCB

Internship Coordinator – Dennis Ng (International Students only)

Email: ng@compsci.byu.edu
Phone: 801-422-2835
Office: 3322 TMCB

Career Services – Lane Muranaka

Website: careers.byu.edu (Handshake--see flyer in packet)
Email: lane_muranaka@byu.edu
Phone: 801-422-9360
Website: <https://careers.byu.edu/lane-muranaka> (schedule appointment)
Office: 2172 WVB

Career Advisor Computer Science Department--Wagner Pinheiro

Email: wagner@cs.byu.edu
Phone: (801) 422-0211
Office: 1112 TMCB

Clubs

ACM – Kimball Germane, cs.byu.acm@gmail.com

Developers Club – Kimball Germane, dev-assoc@byu.edu, visit dev.byu.edu to join and learn more

BYU Competitive Programming Club—Ryan Farrell, farrell@cs.byu.edu, visit cpc.byu.edu to join and learn more

Dev-G (Game development) – Seth Holladay, dev-g-assoc@byu.edu

Linux Users Group – Casey Deccio, linux-assoc@byu.edu

Women in Computer Science – Angela Jones – angela@cs.byu.edu, wics@cs.byu.edu



Things to Know

Resources for Graduation Planning

- Flow Charts and Major Academic Plans (MAPs) can be found here: <https://science.byu.edu/advisement/explore-majors-and-minors>.
- Academic advisors in N-181 ESC will help you understand course sequencing and help you plan classes to efficiently fill requirements. They can also help you with study skills and initial career exploration as well as connecting you with correct resources.
- Plan and register from your plan on MyMAP. Your academic advisor can help you understand how to best utilize this resource.
- Evaluate your current program. Periodically major programs are updated. An academic advisor would be happy to review the differences between the programs with you to help you determine what would be best for you.
- Consider meeting with a faculty advisor in your department. Contact info is found on the first page of this packet.

Tutoring Resources and Research

- Volunteer peer tutors are available through Y Serve if you need help with a class. Also, if you excel in a subject, consider serving your fellow students by becoming a tutor. Find out more here: <https://tutoring.byu.edu/>.
- Many departments provide TA Tutorial Labs and research opportunities. Check your department for details:
 - Chemistry and Biochemistry: C-104 BNSN, 801-422-6261, <https://chem.byu.edu/department/faculty/>
 - Computer Science: 3361 TMCB, 801-422-3027, cs-office@byu.edu
 - Geological Sciences: S-389 ESC, 801-422-3918, geology@byu.edu
 - Mathematics: 275 TMCB, 801-422-2061, office@mathematics.byu.edu
 - Mathematics Education: A180 ESC, 801-422-1735, office@mathed.byu.edu
 - Physics and Astronomy: N-283 ESC, 801-422-4361, physics_office@byu.edu
 - Statistics: 2152 WVB, 801-422-4505, statsec@stat.byu.edu

Prepare Early for a Career

- Check out Careers & Experiential Learning in 1134 WSC and at careers.byu.edu.
- Consider doing an internship.
 - Attend the STEM and Career Fairs held in fall and winter semesters.
 - Talk to your department about internship opportunities.
 - Use LinkedIn and Handshake (see flyer in this packet) to connect with alumni and apply for jobs/internships. BYU Connect is another great resource for networking (connect.byu.edu).
 - Talk with the college Career Director who can help you search for internships as well as assist you with many other career related strategies (see first page of this packet).
- Consider taking StDev 317 (Career Strategies) your junior year.
- Consider taking either Chem 502, CS 502, Geol 502, Math 502, PHSCS 502, or STAT 502 (1-credit Networking Class). Class is held for 1 hour each week.

Bioinformatics Emphasis

(81 Credit Hours)

Fall 2025 Requirements

1. Grades below C- are not allowed in major courses.

Core Course Requirements (85 Hours)

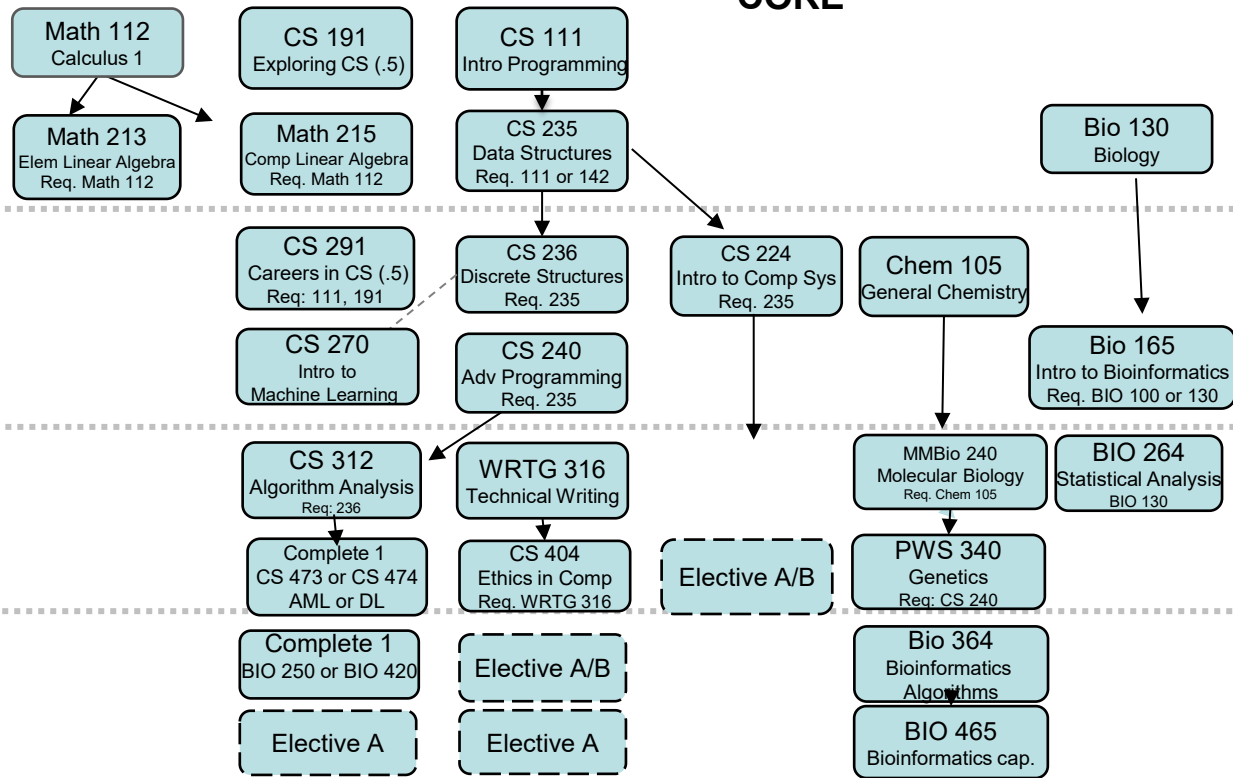
- Complete the following 10 courses: CS 111, 191, 224, 235, 236, 240, 270, 291, 312, 404,
- Complete the following 7 courses: BIO 130, BIO 165, BIO 264, BIO 364, BIO 465, MMBIO 240, PWS 340
- Complete the following 5 courses: CHEM 105, Math 112, Math 213, Math 215, WRTG 316
- Complete 1 courses: BIO 250 or BIO 420
- Complete 1 course: CS 473 or CS 474**
- Complete 12 total hours from the following:

A. Complete 9 to 12 credit hours from the following: BIO 463, CS 256, 260, 329, 330, 345, 355, 356, 393, 401R, 405, 412, 428, 430, 431, 450, 452, 453, 455, 456, 460, 462, 465, 466, 470, 471, 473, 474, 479, 480, 481, 482, 483, 486, 493R, 513, 556, 574, 575, or 580

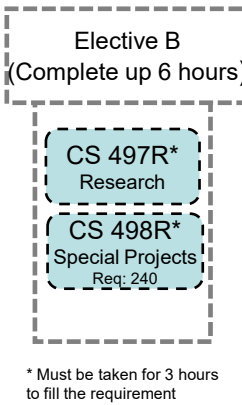
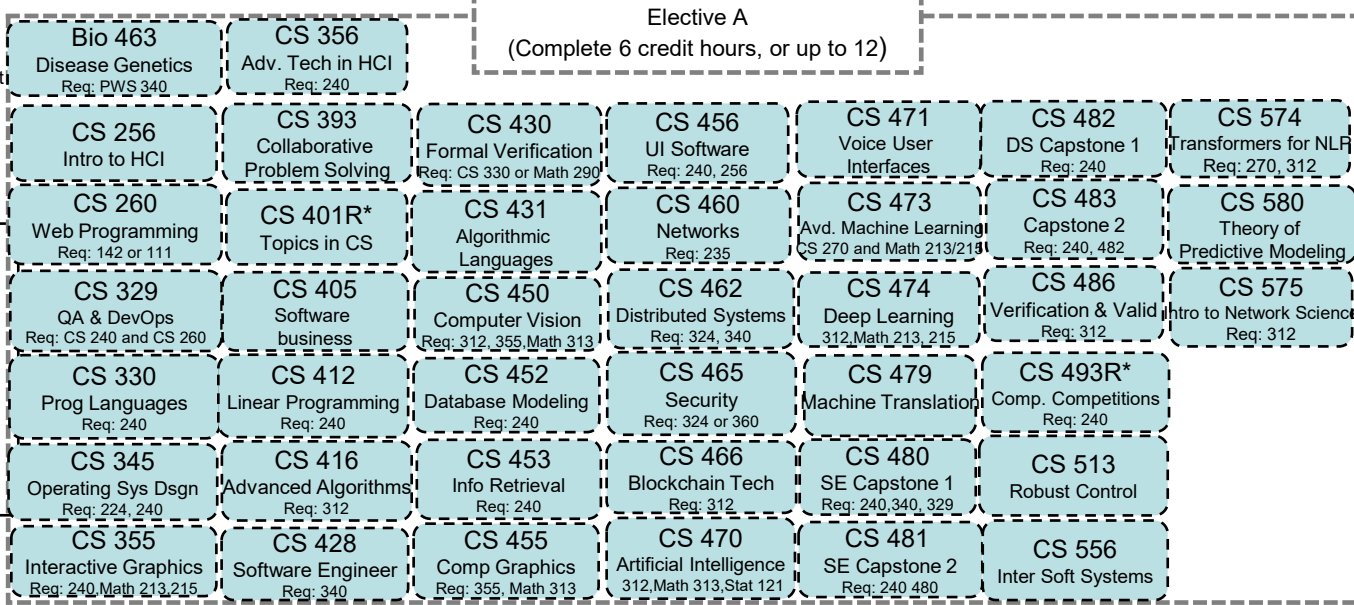
B. Complete up to 6 hours CS 497R*, 498R*

**Courses may not double count requirements 5 and 6

CORE



Freshman
Semester 1
Semester 2
Sophomore
Semester 3
Semester 4
Junior
Semester 5
Semester 6
Senior
Semester 7
Semester 8



Key

- Elective classes
- Core classes
- Prerequisite
- - -> May be taken concurrently

* Must be taken for 3 hours to fill the requirement

Guide only – Consult MyMap for your major/minor requirements



BYU's own job board. Employers who want to hire BYU graduates or offer internships to current students post job openings to this website and students apply. Just like LinkedIn, employers can view student profiles and students can network as they apply for jobs and internships



Login to handshake.byu.edu >>> BYU Net ID

**you do not need to create an account, just sign in with your BYU information*

HOW TO MAKE THE MOST OUT OF HANDSHAKE:

1. COMPLETE YOUR PROFILE

- Upload your resume and it will auto-fill in your profile
- Completed profiles tailor your Handshake experience
- Information from your transcript is already uploaded
- Fill in the Summary/Bio section
- Fill in your past jobs and experiences, including all the bullet points you use on your resume
- Add a professional headshot and background photo

Remember: every word in your profile will be searchable by students and employers

4. EXPLORE FELLOW STUDENTS

- “Students” tab
- Search for fellow BYU students to view their profiles and job positions.

5. ATTEND EVENTS

- The “Events” tab will be your key to attending info sessions, interviews, and Career Fairs
- The “Calendar” tab under “Events” will show you what events are coming soon
- Make sure to save events you are interested in or RSVP so you do not forget to attend
- Spread the word to your friends on social media

6. DOWNLOAD HANDSHAKE APP

- Search: “Handshake” not “Handshake Career Services”
- Input your BYU e-mail address: netID@byu.edu (it will forward emails to the e-mail you have on file with BYU)
- Handshake will send you a link via e-mail to enable your account in the app
- Navigate the app to perform all the functions of the website that have been previously mentioned

7. VISIT THE CAREER STUDIO

- Freshen up your resume, cover letter, or LinkedIn
- Receive networking help
- Practice interviewing with a mock interview
- Meet with a full-time Career Director in your field

8. GET A JOB, RING THE BELL

- Once you're hired, stop by the Career Studio to ring our Victory Bell and get a picture for the Victory Board



employers are
5X MORE LIKELY
to view a profile that has
at least one job/skill/organization

2. APPLY FOR JOBS

- Search for job titles, employers, or skills
- Apply for interesting jobs that meet your skill set

3. RESEARCH COMPANIES

- Under the “Jobs” Tab there is an “Employers” Tab
- Search for keywords or locations to find companies that are the right fit for you
- Plan to attend their info sessions on BYU Campus, connect with them at Career Fairs, or set up informational interviews to learn more

Remember: when looking at companies or jobs, Handshake will tell you what other BYU students have worked there. Use this resource to network and discover more information!

Possible Careers with a Computer Science major

(Not a comprehensive list)

Animation Tool Developer
Applications Developer
AI Engineer
AI Ethics Consultant
Bioinformatics developer
Business Intelligence Analyst
Computational and Information Scientist
Computer Programmer /Vision Engineer
Cloud Architect
Cybersecurity Analyst
Data scientist
Database manager
DevOps Engineer
Embedded Systems Programmer/Engineer
Front-End Developer
Information Architect
IT Project Manager
Multimedia Programmer
Natural Language Processing Specialist
Network Architect
Product Manager
Professor*
Research Scientist
Robotics Software Engineer
Security Architect
Site Reliability Engineer
Software Test Engineer
Software Development Manager
Systems Engineer
UI/UX Engineer / Researcher / Designer
Video game developer and designer
Web Designer / Programmer

*Usually requires a graduate degree

More information is available at the Counseling and Career Center and from CareerOneStop:

<http://www.careeronestop.org/>