

Welcome to the

Computer Science Major Animation and Games 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

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.

BYU Computer Science Animation and Games Emphasis

Fall 2025 Requirements

77 – 81.5 credits

Grades below C- are not allowed in major courses

Core Course Requirements (78.5-79.5 Hours)

1. Complete the following prerequisite courses:

CS 111, CS 191, CS 235, CS 291, CSANM 150, DESAN 101

(Apply to the program)

2. Complete the following: CS 224, 236, 240, 312, 324, 355, 455, CSANM 250

3. Complete the following supporting courses:

WRTG 316, Math 112, 213, 215, Phscs 121

4. Complete one of the following: STATS 121 or 201

5. Complete one of the following: Math 113, Math 290, or STAT 220

6. Complete either CSANM 354 or CSANM 342

7. Complete either DESAN 460 or CS 404

8. Complete 6 credits from the following: CSANM 352, 450, 452, 459 or 460

Elective Course Requirements

9. Complete 2 from the following: CS 252, 256, 260, 270, 329, 330, 340, 345, 356, 393, 401R, 412, 428, 431, 450, 452, 453, 456, 460, 462, 465, 466, 470, 471, 473, 474, 479, 486, 556, 574, or 575

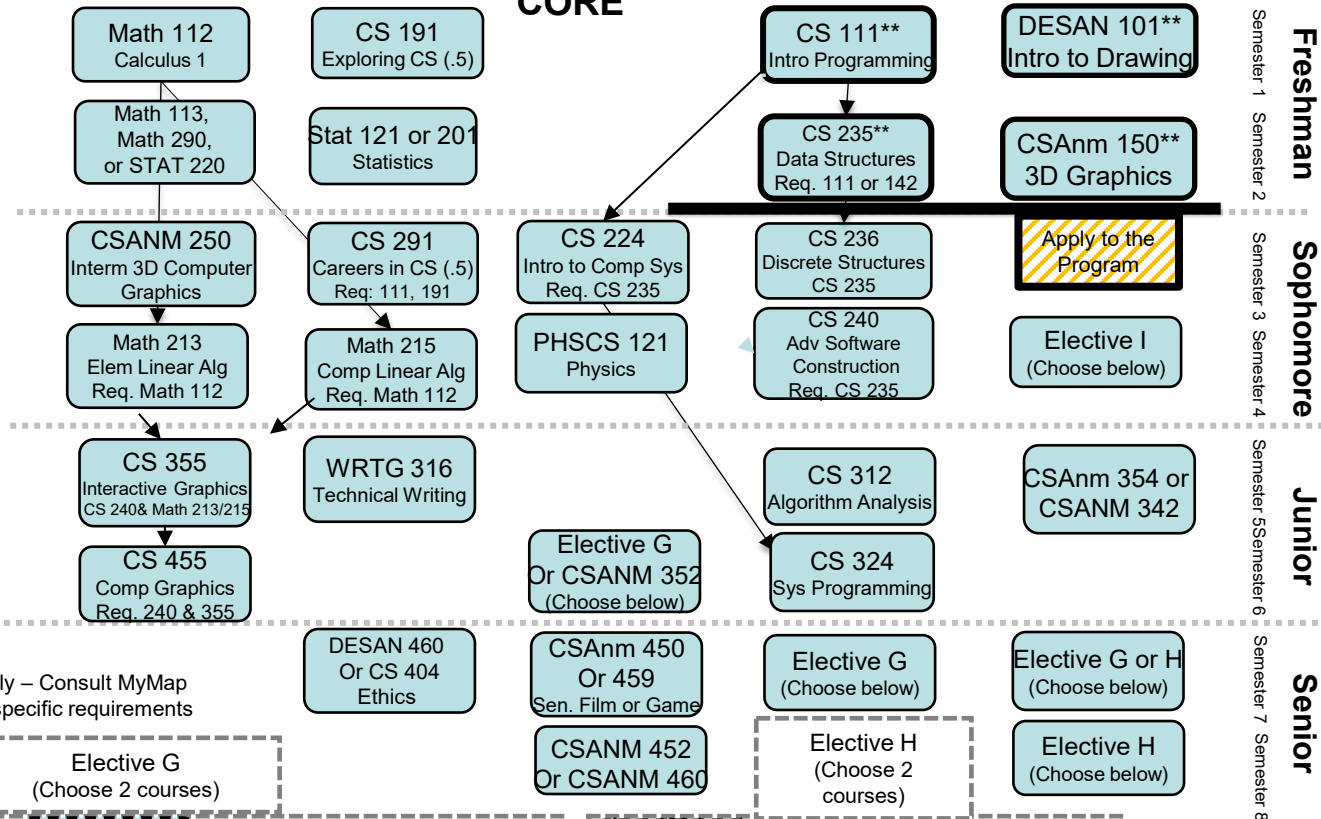
10. Complete 2 from the following: Any 400 course listed under 9, CS 501R, 513, 556, 574, 575, 580, CSANM 210, 252, 258, 340, 342, 351R, 353, 354, 355, 452, 454, 458R, DESAN 364R, or ECEN 425.

11. Complete 1 course from the following:

ARTHC 111, ARTHC 202 or TMA 294

Guide only – Consult MyMap for your specific requirements

CORE



Freshman
Semester 1
Sophomore
Semester 2
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 completed before applying to program

CS 252 Computational Theory	CS 345 Operating Sys Dsgn Req: 224 & 240	CS 430 Formal Verification CS 330 or Math 290	CS 462 Distributed Systems Req: 324, 340	CS 479 Machine Translation	Any 400 level course listed, under elective G	CSANM 210 Visual Narrative	CSANM 354 Materials & Surfacing May only use once	Elective I (Choose 1 course)		
CS 256 Intro to HCI	CS 356 Adv. Tech in HCI Req: 256 & 260	CS 431 Languages & Compilers	CS 465 Security Req: 324 or 360	CS 486 Verification & Valid Req: 312		CS 498R Undergraduate Special Projects	CSANM 252 Intro to 3-dimensional Graphics		CSANM 355 Photo for Anim	ARTHC 111 Art History
CS 260 Web Programming Req: 142 or 111	CS 393 Collaborative Problem Solving	CS 450 Computer Vision	CS 466 Blockchain Tech Req: CS 312	CS 556 Inter Soft Systems		CS 501R Advanced Topics In CS	CSANM 258 Scripting for Animation		CSANM 452 Sen. Film 3 May only take once	ARTHC 202 World Civ 1500+ (Also can fulfill ARTS and CIV 2)
CS 270 Intro to Machine Learning	CS 401R** Topics in CS	CS 452 Database Modeling Req: 240	CS 470 Artificial Intelligence 312, Math 313, Stat 121	CS 574 Transformers for NLP		CS 513 Robust Control	CSANM 340 Intro to Game Design		CSANM 454 Advanced Shading	TMA 294 History of Animation
CS 329 QA & DevOPs Req 240	CS 412 Programming & Convex Optimization	CS 453 Info Retrieval Req: 240	CS 471 Voice User Interfaces	CS 575 Intro to Network Science		CS 574 Transformers for NLP	CSANM 342 Real-time techniques May only use once		CSANM 458R 3D Effects	
CS 330 Prog Languages Req: 240	CS 416 Adv. Algorithms CS 312	CS 456 Mobile and Ubiquitous HCI Req: 240, 256	CS 473 Avd. Machine Learning 312, Math 213, Stat 121	CS 473 Avd. Machine Learning 312, Math 213, Stat 121		CS 575 Intro to Network Science	CSANM 351R Lighting for 3D Graphics		DESAN 364R Digital Sculpting	
CS 340 Software design CS 260 and 240	CS 428 Software Engineer Req: 340	CS 460 Networks Req: 324 or 360	CS 474 Deep Learning 312, Math 213, Stat 121	CS 474 Deep Learning 312, Math 213, Stat 121		CS 580 Predictive Modeling	CSANM 353 Previsualization		EC EN 425 Real Time Op Sys	



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/>*