Dear first-year student,

Congratulations on your acceptance to the Computer Science & Business Honors program (CSB), and welcome to Lehigh! We are excited to have you as part of the Class of 2028.

During your time at Lehigh University, the Computer Science & Business Association (CSBA) will serve as the student organization of the CSB program. Our role is to represent all students involved in the CSB program, provide opportunities for professional development, and organize social events tailored for CSB students.

This guide not only helps you plan your schedule but also discusses the details (e.g., class tips, course pace, etc.) that you should consider when choosing your sections. That being said, don't be afraid to differ from our recommendations to challenge yourself. The more you push yourself, the more prepared you will be to tackle demanding tasks in the future.

In the 2024-2025 school year, our goal is to establish a stronger sense of unity and community for all CSB students, starting with the Class of 2028. In doing this, we hope that CSB students will more strongly unify to succeed together in academic, professional, and social affairs. As the school year progresses and new classes enter the CSB program, our resources will be modified, expanded upon, and refined by the CSBA to serve you more appropriately.

This year we will also be offering a [PreLusion](#) program for you to learn the ins and outs of CSB, make CSB friends early on, and hear about all the resources available to make your time at Lehigh successful.

If you have any questions regarding the CSB program, this guide, or anything Lehigh-related, please contact me, other board members, or the CSB advisors.

Sincerely,

Julian Chattopadhyay
President
Computer Science & Business Association

CSB Association

Lehigh University's Computer Science and Business Association (CSBA) is a student club organization run by and for students majoring in Computer Science and Business honors program. We promote the cohort's wants and needs to the Computer Science Department, the College of Business, and the greater university. The organization has three main goals: building technical skills, assisting in the job application process, and encouraging a fun social atmosphere.

First Year Representative

The First Year Representative is the elected representative of the class of 2028. They plan events to help the class of 2028 learn, grow, and meet each other! They're chosen by the First-Year students. Check your email from time to time to catch any updates about the position.

Mentorship Program

Through CSBA's Mentorship Program, you will be assigned a mentor - a current upper-class student in the CSB program. It is structured in a way that helps first-year students with a smooth transition into the CSB program at Lehigh through a series of social, professional, and technical development events along with meetings with their mentors. At the end of the program, each mentee will have all tools and knowledge to succeed at Lehigh and beyond.

Committees

We want everyone involved in the decision-making of the CSBA, through committees. We believe this will enhance the engagement in CSBA immensely, invite more diversity of thoughts and increase the pool of helping hands. This will be an excellent steppingstone for anyone looking for a leadership position in the CSBA next year.

CSBA EBoard

Julian Chattopadhyay	**Vrushti Patel**	**Daniel In**	**Sanchita Shrivastava**
President	VP Development.	VP Experience	Secretary
Juc226@lehigh.edu	vap326@lehigh.edu	dai226@lehigh.edu	sas626@lehigh.edu

Matt Sargent	**Ben Stahl**	**Zaki Khan**	**Mithat Eroglu**
Treasurer	Tech. Development	Prof. Development	Public Relations
Mas526@lehigh.edu	bes227@lehigh.edu	zmk227@lehigh.edu	mee227@lehigh.edu

Amanda Fogel	**Ellee Segal**	**Liz Attumalil**
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CSB FAQ

How many credits is the CSB program?
The CSB honors program requires 136 credits. With that being said, a student may average around 17 credits per semester (this may drop if you're coming in with transfer or AP credits).

How many students are in CSB?
There are approximately 240-270 students currently in the program. Recently, Lehigh Admissions took away the cap of admitted students, but we have seen an increase to 60-75 students.

How easy is it to study abroad as a CSB student?
Fortunately for CSB students, the Lehigh in Barcelona summer program conveniently fits into your schedule. It offers a required course in Barcelona over the summer and a three-credit internship, which counts as a professional elective! There are also a few other possibilities to study abroad during the school year, just make sure you're planning out your credits carefully.

Do I have time for extra-curricular activities?
Although CSB is a difficult program, students are usually found to be some of the most involved students on campus!

CSB Faculty/Staff

George Witmer
CSE Co-Director
gsw2@lehigh.edu

TBD
College of Business Co-Director

Andrea Goff
Academic Advisor
ahg212@lehigh.edu

First-Year Course Registration Guide

Read through these 5 steps before you register!

The *First-Year Course Registration Guide* provides a step-by-step walkthrough of how to register for your Fall semester courses.

How this works:

- You will need to register for a minimum of 12 credits to be a full-time student, while the maximum number of credits you can take in your first semester is 18.

- A typical course load is 15-17 credits (most courses are each 3 or 4 credit hours), meaning you should register for 4 or 5 courses in your first semester.

- You can only register for courses numbered below 100, unless given permission by a department or professor.

- In June you will receive a short onboarding survey from the Office of Registration and Academic Services.

- The Office of Registration and Academic Services has created a [website for first- year students](#) that includes step-by-step videos and Frequently Asked Questions about registration.

- The Office of Registration and Academic Services will email you in June to confirm the day and time in July registration will open for you. It is important that you complete your course registration process during the assigned dates. Use the following instructions to ensure you are prepared for that process!

□ Step 1 – What are the Requirements?

Each undergraduate college has a set of basic requirements all students must complete regardless of their major program(s). As a student in Computer Science and Business you must complete:

Distribution Requirements for Computer Science and Business

Professional Electives   9 credits

Any CSE or Business classes that are approved by the program co-directors

Natural Sciences (NS)   12 credits

Choose from those designated in: Chemistry & Biological Sciences, Physics & Astronomy, Earth & Environmental Sciences, or Anthropology & Psychology. At least one course must include an associated laboratory or at least one credit must be earned in a laboratory.

Social Sciences (SS)   3 credits

Choose from those designated in: anthropology, economics, political science, history, international relations, journalism, psychology, sociology, and science, technology, and society.

Arts and Humanities (HU)   6 credits

Choose from those designated in: architecture, art, design, classics, history, modern languages and literatures, English, music, philosophy, religion studies, and theatre.

CSE Electives   3 credits

Free Electives   7 credits

Total required for graduation: 136 credits

Please note that in addition to these traditional disciplines, students may earn distribution requirements by taking courses in the interdisciplinary programs:

Africana Studies, Asian Studies, Cognitive Science, Environmental Studies, Ethics, Film & Documentary Studies, Global Studies, Health, Medicine, and Society, Jewish Studies, Latin American and Latino Studies, Sustainable Development, and Women, Gender, and Sexuality Studies.

□ Step 2 – What Courses Should I Register For?

In your first semester you should begin your core classes in CSB. You should plan to register for:

- ENGL 001
- CSE 007
- ECO 001

Now, for the rest of your schedule…

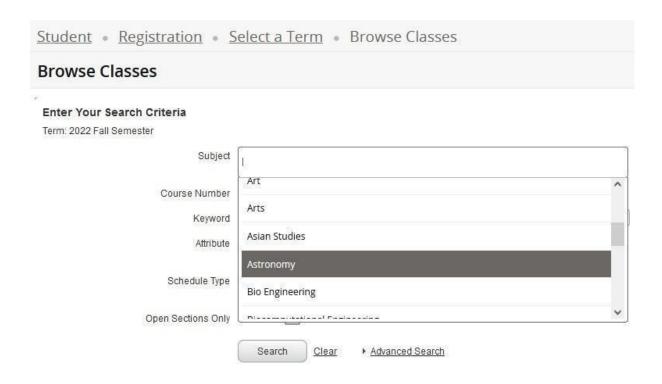## □ STEP 3 – Review Your Record for Applied AP or Transfer Credits

If you expect AP or transfer credit, make sure to have your scores and/or transcript sent to Lehigh!

If your scores aren't reported in a timely manner, the Office of Registration and Academic Services will bar you from taking anything more advanced than introductory courses during your first semester. You should also review the "Advanced Placement and College Credit" section on page 24 in this booklet for detailed information on how various departments treat AP, SAT, ACT, and IB credit.

□ STEP 4 – Preparing to Register

There are instructional videos on how to look up and register for classes, but here are some helpful tips to get you started:

- Login to the Registration Portal via your Student Banner to review all course offerings for the Fall Semester, or access the class search tool directly.
- Choose the link, "Browse Classes by Semester."
- Select from the drop-down, "2024 Fall Semester" and click "Continue."
- You can look up courses by Subject or by Attribute, which are linked to our distribution requirements.

Student • Registration • Select a Term • Browse Classes

Browse Classes

Enter Your Search Criteria
Term: 2022 Fall Semester

Subject

Art
Course Number
Arts
Keyword
Asian Studies
Attribute
Astronomy
Schedule Type
Bio Engineering
Open Sections Only

Search   Clear   ▶ Advanced Search

- Displayed results will tell you the CRN, course number, title, instructor, days, times, and credits of a course
- Clicking on the title of a course shows you important information such as:
  - Course description
  - Restrictions, which may prevent registration
  - Fees, which may be associated with the course
  - Current enrollment

□ STEP 5 – Schedule Building Strategy

Tips to strategically build your schedule in July:

- Make a list of the courses you need to register for
- Make a list of the courses you would like to register for
- Use the 'Plan Ahead' feature. It's on the same page as 'Browse Classes by Semester'. Use this to decide on the classes you know you're going to take. When registration time comes, you can just click on the plan you made and add those specific classes!
- Check if courses have pre-requisites (via catalog), or registration permissions (via course schedule)
- Determine which course(s), if any, you are absolutely required to take this fall.
- Register for the highest priority courses first.
- Next register for the course with the fewest available seats, and so on
  - If you are exploring your options and are not required to take a strict set of courses, you should register for the course with the fewest available seats first.

□ STEP 6 – Meet with Advisor

Around mid-June, you will receive an email from your Academic Advisor, Andrea Goff, about registering for classes. **Be sure to check your Lehigh email daily**. Complete the Google form attached in that email. In this Google form:

- Upload a screenshot of your Plan Ahead
- Schedule a 30-minute Zoom meeting with Andrea to review your classes

Sample Course Schedules

This information will help you plan your four years at Lehigh. If you are coming in with AP credits for any of these classes, feel free to replace the class in this schedule with something that can be taken later, if possible. Each page will have some notes about the classes suggested.

First Year

FALL (17.5)	SPRING (17)
CSE 007 (4): Intro to Programming No prerequisites This class teaches Java, which is needed for most CSE classes. You don't need any prior programming experience. Take CSE 017 if you have AP credit.	**CSE 017 (3): Programming and Data Structures** Prerequisite: CSE 007 Take CSE 109 if you already have credit.
MATH 021 (4): Calculus I No prerequisites Take MATH 022 if you have AP credit.	**MATH 022 (4): Calculus II** Prerequisite: MATH 021 Take MATH 205 if you already have credit. Ask your advisor if you need a class-level override.
ECO 001 (4): Intro to Economics No prerequisites Take ECO 045 if you have AP credit.	**ECO 045 (3): Statistical Methods** No prerequisites A lot of overlap with AP Statistics
ENG 001 (3): Critical Reading and Composition No prerequisites Take a free elective if you have credit.	**MGT 043 (3): Organizational Behavior** No prerequisites Focuses on applications of management theories. This can be writing intensive.
BUS 001 (1): Foundations of Business No prerequisites Gives a general overview of how a business functions. CSB Lecture sections 111, 112 & 113 Recitation section 100	**Natural Science (3)** **Natural Science lab (1)**
BUS 003 (1.5): Business Communication 1 No prerequisites	**BZX 002 (0): Student to Professional Co-Curriculum** Half semester course required by all incoming first year CSB students.

Second Year

FALL (17)	SPRING (16)
CSE 109 (4): Systems Software Prerequisite: CSE 017	**CSE 341 (3): Database Systems** **OR** **CSE 340 (3): Design and Analysis of Algorithms** Prerequisite: CSE 017
MATH 205 (3): Linear Methods Prerequisite: MATH 022 Your last math class! Take CSE 109 if you already have credit	**CSE 202 (3): Computer Organization and Architecture** Prerequisite: CSE 017 Learn C, Assembly, representation of data, and optimization
ACCT 151 (3): Financial Accounting No prerequisites	**ACCT 152 (3): Managerial Accounting** Prerequisite: ACCT 151 A lot of overlap with AP Statistics
CSE 140 (3): Discrete Structures and Algorithms Prerequisites: MATH 021, CSE 017	**CSE 262 (3): Programming Languages** Prerequisites: CSE 017
Natural Science (3)	**Natural Science (4)**
Free elective (1)	

Third Year

FALL (16)	SPRING (16.5)
CSE 241 (3): Database Systems OR CSE 304 (3): Design and Analysis of Algorithms Prerequisites: MATH 021, CSE 140, CSE 017	**CSB 311 (3): Advanced Accounting Information Systems** Prerequisites: ACCT 152, CSE 241/341
CSE 216 (3): Software Engineering Prerequisite: CSE 017 In a group, you get to try every role for every phase of your project	**CSB 312 (3): Design of Integrated Business Applications I** Prerequisite: CSB 311, CSE 241/341, CSE 216 First Capstone class
FIN 125 (3): Intro to Finance Prerequisites: ACCT 151, ECO 045, MATH 021	**SCM 186 (3): Supply Chain Management** Prerequisites: MATH 021, ECO 045 A lot of overlap with AP Statistics
MKT 111 (3): Principles of Marketing Prerequisite: ECO 001	**LAW 201 (3): Legal Environment of Business** Prerequisite: ECO 001
Natural Science (1)	**ECO 146 (3) OR ECO 119 (3)** Prerequisites: ECO 001, MATH 021
Humanities req. (3)	**BUS 203 (1.5): Business Communication II** Prerequisites: BUS 003, CSB 311

Fourth Year

FALL (18)	SPRING (16)
CSE 303 (3): Operating System Design Prerequisites: CSE 202, CSE 109	**Professional elective (3)**
CSE 252 (3): Computers, the Internet, and Society No prerequisites Computer Science ethics. Writing intensive.	**Professional elective (3)**
CSB 313 (3): Design of Integrated Business Applications II Prerequisite: CSB 312 Second Capstone class	**CSE elective (3)**
Humanities requirement (3)	**MGT 301 (3): Strategic Management in a Global Environment** Prerequisites: MKT 111, ECO 146/119, LAW 201, FIN 125, SCM 186, MGT 043, CSB 312, CSB 311, ACCT 152, BUS 001, BUS 003, BUS 203, CSB 311
Professional elective (3)	**Social Science requirement (3)**
Free elective (3)	**Free elective (1)**

Mathematics Courses and Calculus Placement Guidelines

The Computer Science and Business program requires that all students obtain credit for MATH 021, MATH 022, and MATH 205.

Introductory Calculus courses

There is a big difference between calculus study at Lehigh and calculus at most high schools. A solid high school precalculus course is a necessary background for calculus at Lehigh. Students need a strong foundation in functions and trigonometry to really thrive in calculus. Most students who take calculus in high school are accustomed to using a graphing calculator. Calculators are not permitted in exams or quizzes in Lehigh calculus classes. With different calculus sequences, the mathematics department can tailor its offerings to students with different preparations and needs for studying calculus.

Every student who intends to take an introductory Calculus class at Lehigh (except those who receive AP or transfer credit) will be required to use an assessment provided by ALEKS, available beginning in June. Direct communication about ALEKS will be shared with all incoming students via their Lehigh email address.

MATH 075: Calculus I, Part A. 2 credits, Fall semester only

ALEKS score of 61 or greater required.

Who should take this course? Students who need MATH 021 but do not meet the SAT or ACT score requirements to register for MATH 021.

Course description: Covers the same material as the first half of MATH 021. Meets three hours per week, allowing more class time for each topic than MATH 021.

Completing MATH 075 and 076 substitutes for MATH 021. To complete the sequence, students will need to take MATH 076: Calculus I, Part b (2 credits) in the spring semester.

ALEKS

ALEKS will administer an assessment that will provide a score, which will indicate the appropriate first semester Calculus course(s). ALEKS will also indicate the topics and areas for improvement and will provide modules to help you get ready for the Fall semester. After working through these modules, you can test again and improve your Calculus placement results. More details about ALEKS will be emailed out soon.

Calculus Courses for Students with AP, IB, or Transfer credit

MATH 021: Calculus I   4 credits, Fall & Spring semesters
ALEKS score: 76 or greater

Course description: Functions and graphs; limits and continuity; derivative, differential, and applications; indefinite and definite integrals; trigonometric, logarithmic, exponential, and hyperbolic functions.

MATH 022: Calculus II   4 credits, Fall & Spring semesters
Course description: Applications of integration; techniques of integration; separable differential equations; infinite sequences and series; Taylor's Theorem and other approximations; curves and vectors in the plane.

Please note: Students seeking placement into Calculus II or higher must provide credentials to Registration & Academic Services (this includes approved TR, IB, or AP credit) prior to registration. No change in registration will be allowed until the proper credentials arrive, and the deadline is the 10th day of class. No exceptions will be made.

The Mathematics Department offers an anticipatory exam for students who feel that they have mastered the material of MATH 021 or MATH 022 but do not have the credentials for approved credit. Please be aware that the success rate on this exam is typically very low. You may email the math department for information on the contents of this exam.

MATH 205: Linear Methods   3 credits
Who should take this course? For students with credit for MATH 021 and MATH 022. This is your last math class!

Course description: Linear differential equations and applications; matrices and systems of linear equations; vector spaces; eigenvalues and application to linear systems of linear equations

AP credit information
A score of 4 or 5 in the AB Advanced Placement exam OR a 4 or 5 on the AB sub score of the BC exam gives you credit for MATH 021 (4 credits).

A score of 4 or 5 on the BC Advanced Placement exam gives you credit for MATH 021 & MATH 022 (8 credits).

International Baccalaureate Exam
Students are awarded MATH 021 credit for a score or 5 or higher on the high-level IB Mathematics exam.

Should I take a Math course my first semester at Lehigh?

It's best to take math in the fall semester. Experience shows it is unwise to let too much time elapse between your last high school calculus or precalculus course and your first college calculus course at Lehigh. Additionally, many science courses have calculus pre- or co-requisites. For these courses, you must complete or enroll in the required calculus course before adding the science course to your schedule. Students with questions about Math or Calculus placement should contact LU Math

Advanced Placement & College Credit Chart 2024-2025

Please use this chart to determine what Advanced Placement credit you may receive from various Lehigh departments. You must have your scores submitted directly to Lehigh (code 002365).

Any delay in submitting your scores will impact your ability to register for courses.

Credit chart			
Art	4	AP Art History	ART elective (4 credits)
Art	5	AP Art History	ART 001 (4 credits) & ART 002 (4 credits)
Art	5	AP Studio Art: 2D Design	ART 073 (4 credits)
Biology	4 or 5	AP Biology	BIOS 001 (4 credits)
Chemistry	5	AP Chemistry	CHM 030 (4 credits)
Computer Science	4 or 5	AP Computer Science A	CSE 004 (4 credits)
Computer Science	4 or 5	AP Computer Science Principles	CSE 012 (3 credits)
Earth & Environmental Science	4 or 5	AP Environmental Science	EES 002 (3 credits) & EES 022 (1 credit)
Economics	4 or 5	AP Microeconomics	ECO elective (2 credits)
Economics	4 or 5	AP Macroeconomics	ECO elective (2 credits)
Economics	4 or 5	AP Microeconomics and AP Macroeconomics	ECO 001 (4 credits) & ECO elective (2 credits)
English	4	AP English Language and Composition or	ENGL 001 (3 credits)

		AP English Literature and Composition	
English	5	AP English Language and Composition or AP English Literature and Composition	ENGL 001 (3 credits) & ENGL 002 (3 credits)
English	700-749	SAT Evidence-Based Reading & Writing	ENGL 001 (3 credits)
English	750+	SAT Evidence-Based Reading & Writing	ENGL 001 (3 credits) & ENGL 002 (3 credits)
English	6 or higher	SAT optional essay exam – at least a score of 6 on all three parts	ENGL 001 (3 credits)
English	32-34	ACT English exam	ENGL 001 (3 credits)
English	35+	ACT English exam	ENGL 001 (3 credits) & ENGL 002 (3 credits)
English	8+	ACT optional writing test	ENGL 001 (3 credits)
English	5+	IB exam	ENGL 001 (3 credits)
History	5	AP American History	HIST elective (4 credits, Social Science distribution requirement)
History	5	AP European History	HIST elective (4 credits, Social Science distribution requirement)
History	5	AP World History	HIST elective (4 credits, Social Science distribution requirement)
Latin	4 or 5	AP Latin	LAT 011 (4 credits)
Mathematics	4 or 5	AP Calculus AB exam or an AB subscore of 4 or 5 on BC exam	MATH 021 (4 credits)

			MATH 021 (4 credits)
Mathematics	4 or 5	AP Calculus BC exam	& MATH 022 (4 credits)
Mathematics	5	High-level IB Mathematics exam	MATH 021 (4 credits)
Modern Languages & Literature	4	Any of AP Language and Culture subject exams	Interm. Level I (4 credits)
Modern Languages & Literature	5	Any of AP Language and Culture subject exams	Interm. Level I (4 credits) & Interm. Level II (4 credits)
Modern Languages & Literature	4 or 5	AP Spanish Literature and Culture	SPAN 151 (4 credits)
Music	5	AP Music Theory	MUS elective (2 credits)
Physics	5	AP Physics 1: Algebra-Based	PHY 011 (4 credits) & PHY 012 (1 credit)
Physics	4 or 5	AP Physics C: Mechanics	PHY 011 (4 credits) & PHY 012 (1 credit)
Physics	4 or 5*	AP Physics C: Electricity and Magnetism *Only eligible if student also receives AP credit for PHY 011	*PHY 021 (4 credits) & PHY 022 (1 credit)
Political Science	4 or 5	AP US Government and Politics	POLS 001 (4 credits)
Political Science	4 or 5	AP Comparative Government and Politics	POLS 003 (4 credits)
Psychology	4 or 5	AP Psychology	PSYC 001 (4 credits)
Statistics	4 or 5	AP Statistics	MATH 012 (4 credits)

International Baccalaureate

Students who earn the International Baccalaureate may be granted credit in higher-level or advanced subjects with scores of 5 or better or "B" or better. All students will have their credentials evaluated on an individual basis for specific course equivalency. Lehigh's Registration & Academic Services Office must receive the Official IB transcript before credit will be assigned.

CSB Tracks

We'll preface this by saying that CSB tracks are NOT required! As you are advancing in your college career, you might realize what you want to specialize in, especially through your 9 credits of Professional electives. These were created to help students who already have a certain interest in an area. If you want to look into creating a track that isn't already listed, talk to your Academic Advisor!

Name	Classes
Accounting	**ACCT 315**: Financial Accounting (3) **ACCT 320**: Auditing (3) **ACCT 324**: Cost Accounting (3)
Business Economics Consulting	**ECO 301**: Econometric Software (3) **ECO 322**: Competitor and Market Analysis (3) **ECO 333**: Economics of Business Decisions (3) **ECO 357**: Econometrics (3)
Entrepreneurship	**ENTP 101**: Intro to Entrepreneurship (3) **ENTP 201**: Entrepreneurship and Enterprise (3) **ENTP 304**: Software Entrepreneurship (3) **ENTP 315**: Lehigh Silicon Valley (1-4)
Finance	**FIN 323**: Investments (3) **FIN 328**: Corporate Finance (2) **FIN 334**: Derivatives (3)
Management	**MGT 328**: Negotiations and Conflict Management (3) **MGT 333**: HR Management (3) **MGT 342**: Managing in the international Organization (3) OR **MGT 363**: Managing Diversity and Inclusion in the Workplace (3)
Marketing Analytics	**CSE 347**: Data Mining (3) **MKT 312**: Marketing Research (3) **MKT 325**: Consumer Insights through Data Analytics (3) **MKT 326**: Marketing Analytics in a Digital Space (3) **MKT 332**: Sales Management (3)

Marketing Sales	**CSE 347**: Data Mining (3) **MKT 330**: Professional Selling (3) **MKT 328**: Negotiation and Conflict Management (3) **MKT 332**: Sales Management (3)
Supply Chain Management	**SCM 309**: Supply, Cost, and Risk Management (3) **SCM 342**: E-Business Enterprise Applications (3) **SCM 354**: Integrated logistics and Transportation Management (3)
Artificial Intelligence	**CSE 327**: AI Theory and Practice (3) **CSE 326**: Pattern Recognition (3) **CSE 335**: Topics on Intelligent Support Systems (3) **CSE 347**: Data Mining (3) **CSE 348**: AI Game Programming (3) **CSE 360**: Intro to Mobile Robotics (3)
Bioinformatics	**CSE 308**: Bioinformatics Issues and Algorithms (3) **CSE 326**: Pattern Recognition (3) **CSE 320/420**: Biomedical Image Computing Modeling (3) **CSE 347**: Data Mining (3) **BIOS 041**: Biology Core I – Cellular and Molecular (3) **BIOS 115**: Biology Core II – Genetics (3)
Computing Principles	**CSE 302**: Compiler Design (3) **CSE 327**: AI Theory and Practice (3) **CSE 375**: Hardware & Software Topics in Parallel Computing (3)
Hardware-Software	**ECE 081**: Principles of Electrical Engineering (3) **CSE 271**: Programming in C and Unix (3) **ECE 319**: Digital System Design (3) **CSE 336**: Embedded Systems (3) **CSE 375**: Hardware & Software Topics in Parallel Computing (3)
Information Management	**CSE 335**: Topics on Intelligent Decisions Support Systems (3) **CSE 345**: WWW Search Engine (3) **CSE 347**: Data Mining (3)

Interactive Multimedia Systems	**CSE 313**: Computer Graphics (3) **CSE 319/419**: Image Analysis and Graphics (3) **CSE 331**: UI Systems and Techniques (3) **CSE 348**: AI Game Programming (3)
Systems and Networks	**CSE 271**: Programming in C and Unix (3) **CSE 265**: System and Network Administration (3) **CSE 336**: Embedded Systems (3) **CSE 334**: Software System Security (3) **CSE 342**: Fundamentals of Internetworking (3) **CSE 343**: Network Security (3) **CSE 345**: WWW Search Engine (3) **CSE 371**: Principles of Mobile Computing (3)
Software Systems	**CSE 271**: Programming in C and Unix (3) **CSE 302**: Compiler Design (3) **CSE 334**: Software System Security (3) CSE 371: Principles of Mobile Computing (3)