### General Education Component

**Language Arts (13 credits)**
- ENGL 121, 122, 223
- SPCH 101 – Recommended
- Foreign Language

**History and Social Science (12 credits)**
- History (8)
- Social Science (4)
  - Anthropology
  - Psychology – recommended
  - Sociology

**Humanities (12 credits)**
- Fine Arts (0-8)
- Literature (0-8)
- Philosophy (0-8)

**Religion (16 credits)**
- 6 credits of RELB
- 6 credits of course numbers 300 and above.
- One SDA special

### Mathematics and Science Component

**Mathematics (16 credits)**
- Discrete Mathematics (MATH 250)
- Calculus I-III (MATH 181, 281, 282)
- Linear Algebra (MATH 289)
- Statistics (MATH 206 or MATH 315)

**Science (12 credits in sequence)**
- Physics (PHYS 211–216 or 251-256)

Other science elective must enhance the student’s ability to apply the scientific method.

### Computer Science Component

**Required (31 credits)**
- CPTR 141 Intro to Programming
- CPTR 142-3 Data Structures and Algorithms
- CPTR 215 Assembly Language Programming
- CPTR 316 Programming Paradigms
- CPTR 345 Theory of Computation
- CPTR 352 Operating System Design
- CPTR 454 Design and Analysis of Algorithms
- CPTR 495 Colloquium (4 quarters; 1 during the senior year)

**Electives (17 credits)**
- CPTR 235 System software and programming (or CIS 330)
- CPTR 245 Object-oriented system design
- CPTR 350 Computer Architecture
- CPTR 355 Computer Graphics
- CPTR 415 Introduction to Databases (or CIS 440)
- CPTR 425 Introduction to Networking (or CIS 290, CIS 390, & CIS 450)
- CPTR 435 Software Engineering (or CIS 315)
- CPTR 445 Introduction to Artificial Intelligence
- CPTR 460 Parallel and Distributed Computation
- CPTR 464 Compiler Design
- CPTR 496-498 Seminar

Electives from CIS, ENGR, GRPH and MATH require departmental advisor’s approval.

**Cognates (3 credits)**
- ENGR 354 Digital Logic

**Free Electives to bring total credits up to the 192 required for graduation and 60 upper division credits.**

The minimum acceptable grade for any required or elective CPTR course is 2.0. A student’s overall GPA must not fall below 2.0.