**GENERAL EDUCATION CORE** 64 Credits

**First Year Seminar**
- CSCI12000 Windows on Comp. Science* (1)
  *CSCI12000 is required for freshmen and transfer students with fewer than 30 earned hours

**Foundational Intellectual Skills**
Core Communication
- ENG-W 131 or W140 Elementary Comp I* (3)
- TCM32000 Written Communication in Science & Industry (junior standing required)* (3)
- COMM-R 110 Speech (3)
  *C or above is required in ENG-W131/140 and TCM32000

**Analytical Reasoning**
- MATH15300 Algebra & Trigonometry I (3)
- MATH15400 Algebra & Trigonometry II (3)
- STAT30100 Elementary Statistics (3)

**Intellectual Breadth and Adaptiveness**
Life and Physical Sciences – see department list
NOTE: Not all courses on the university list are approved for this program.

**Arts, Humanities & Social Sciences** – must choose 1-2 from Arts and Humanities list and 1-2 from Social Science list

- __________________________ (AH) (3)
- __________________________ (SS) (3)
- __________________________ (AH or SS) (3)

**Cultural Understanding**

For the list of approved General Education Core courses in Cultural Understanding, Arts & Humanities, and Social Sciences, please see:

[http://uc.iupui.edu/UndergraduateEducation/GeneralEducationCurriculum/GeneralEducationCore.aspx](http://uc.iupui.edu/UndergraduateEducation/GeneralEducationCurriculum/GeneralEducationCore.aspx)

**World Language Requirement**
- World Language First Year Proficiency:
  A. ____ 131(4), ____ 132(4)
  B. 200 level or above world language course with C or above

### Computer Science Major Courses 56 Credits

Minimum Grade=C-, Minimum 2.0 Average

**Core Courses**
- CSCI 23000 Computing I [C: MATH 15300] SP, SU1, FA (4)
- CSCI 24000 Computing II [P: 23000 and MATH 15300] (4)
  - SP, SU2, FA
- CSCI 34000 Discrete Computational Structures [P: MATH 15300, C: CSCI 24000] SP, FA (3)
- CSCI 36200 Data Structures [P: 24000 & 34000] SP, FA (3)
- Capstone Experience (Senior Year): (3)

Students may take the capstone research project course (CSCI 49500) or may complete capstone internship (CSCI 49600) per approval

**Applied Computer Science Core**
- CSCI N-211 Introduction to Databases or CIT 21400 Introduction to Data Management (3)
- CSCI N-241 Fundamentals of Web Development or CIT21200 Web Site Designs (3)
- CSCI N-361 Fund. Software Project Management or INFO-I402 Project Management (3)

**Applied Computer Science Electives**

Applied Computer Science majors take 9 major elective courses. No more than 2 courses can be chosen from the list of electives outside of computer science (CSCI). Students must complete one two-course sequence in applied CSCI using Applied CSCI Core and Electives.

- __________________________ (3)
- __________________________ (3)
- __________________________ (3)
- __________________________ (3)
- __________________________ (3)

**Traditional Computer Science Courses (300-400 level)**

- __________________________ (3)
- __________________________ (3)
- __________________________ (3)
- __________________________ (3)

**Human-Computer Interaction**
- INFO-I300 [Listed Pre-req: INFO-I 270] (3)

**General, Open Electives**

Required # of general elective credit hours varies based on how many credit hours needed to reach 120 credits

- __________________________ (12-20)

Total______
1. Must earn minimum 120 hours
2. Must take minimum 32 hours of 300/400 level courses at IUPUI
3. May need 12 hours of general electives to reach 120; must be college-level courses 100 level or higher. See bulletin for list of excluded classes.
4. Only 6 credits of Studio, Clinical, Athletic, or Performing Arts can be applied to the 120 hours
5. One grade of D is allowed in Math and one grade of D is allowed in Life and Physical Sciences.

Life and Physical Science electives
Please refer to the CS Science List for approved life and physical science electives. NOTE: Not all courses on the university list are approved for this program.

The following courses do not appear on the General Education Core but will count as Baccalaureate Competencies Life and Physical Science electives:
ECE20100 Linear Circuit Analysis
ECE20200 Linear Circuit Analysis II
ECE26600 Digital Logical Design

**Applied Computer Science Electives**
- CSCI-N300 Mobile Computing Fundamentals
- CSCI-N305 C Language Programming
- CSCI-N311 Advanced Database Programming, Oracle
- CSCI-N317 Comp. for Scientific Applications
- CSCI-N321 System and Network Administration
- CSCI-N335 Advanced Programming, Visual Basic
- CSCI-N341 Client Side Web Programming
- CSCI-N342 Server Side Web Development
- CSCI-N343 Object-Oriented Programming for the Web
- CSCI-N345 Advanced Programming, Java
- CSCI-N351 Intro to Multimedia Programming
- CSCI-N355 Intro to Virtual Reality
- CSCI-N410 Mobile Computing Application Development
- CSCI-N420 Mobile Computing Cross Platform Development
- CSCI-N430 Mobile Computing and Interactive Applications
- CSCI-N431 E-Commerce with ASP.NET
- CSCI-N435 Data Management Best Practices with ADO.NET
- CSCI-N443 XML Programming
- CSCI-N450 Mobile Computing with Web Services
- CSCI-N461 Software Engineering for Applied Computer Science
- CSCI-N499 Topics in Applied Computing (topic varies)

**Supporting Electives**
- NEWM-N204 Intro to Interactive Media
- NEWM-N230 Intro to Game Design & Development
- NEWM-N241 Stop Motion Animation
- NEWM-N255 Intro to Digital Sound
- NEWM-N304 Interactive Media Applications
- NEWM-N330 Game Design, Development, and Production
- NEWM-N335 Cmptr-Based Character Simulation/Animation II
- NEWM-N431 Game On
- NEWM-N450 Usability Practices for New Media Interfaces
- CIT 202 Network Fundamentals
- CIT 312 Advanced Web Design
- CIT 313 Commercial Web Site Development
- CIT 329 Java Server Programming
- CIT 347 Advanced ASP.NET Programming
- CIT 356 Network Operating System Administration
- CIT-402 Design & Implementation of Local Area Networks
- CIT-406 Advanced Network Security
- CIT-412 XML-Based Web Applications
- CIT-420 Digital Forensics
- CIT 436 Advanced E-Commerce Development
- CIT-440 Computer Network Design
- HERR-A371 Intro to Interactive Design
- HERR-A471 Advanced Interactive Design
- INFO-I202 Social Informatics
- INFO-I270 Intro to HCI Principles & Practices
- INFO-I275 Intro to HCI Theory
- INFO-I310 Multimedia Arts: History, Criticism & Technology
- INFO-I320 Distributed Systems & Collaborative Comp
- INFO-I480 Experience Design & Evaluation of Ubiquitous Computing
- BUS-S302 Management Information Systems
- BUS-L203 Commercial Law I
- BUS-L303 Commercial Law II
- ECE-204 Intro Electrical & Electron Circuits
- ECE-270 Intro to Digital System Design
- ECE-362 Microprocessor Systems & Interfacing
- ECE-471 Embedded Systems
- STAT-514 Design of Experiments
- MATH-165 Calculus I
- MATH-166 Calculus II
- MATH-261 Multivariate Calculus
- MATH-266 Differential Equations

*Please note that the courses above may require pre-requisites. Be sure to plan accordingly.*