

Name \_\_\_\_\_ Date \_\_\_\_\_

ID No. \_\_\_\_\_ Admit Term: \_\_\_\_\_

Anticipated Grad Date: \_\_\_\_\_

**Fall 2014 Applied Computer Science B.A.  
120 credit hours**

**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.

\_\_\_\_\_ (3)

\_\_\_\_\_ (3)

\_\_\_\_\_ (3)

\_\_\_\_\_ (w/ lab) (4)

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

\_\_\_\_\_ (3)

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>

World Language Requirement

\_\_\_\_\_ World Language First Year Proficiency:

Via:

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] SP, SU2, FA (4)

\_\_\_\_\_ 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)

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

\_\_\_\_\_ (3)

\_\_\_\_\_ (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.

### **Applied Computer Science Electives\***

**CSCI-N300** Mobile Computing Fundamentals  
**CSCI-N311** Advanced Database Programming, Oracle  
**CSCI-N317** Comp. for Scientific Applications  
**CSCI-N341** Client Side Web Programming  
**CSCI-N342** Server Side Web Development  
**CSCI-N410** Mobile Computing Application Development  
**CSCI-N431** E-Commerce with ASP.NET  
**CSCI-N499** Topics in Applied Computing (topic varies)

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

### **Supporting Electives\***

**(MAY CHOOSE NO MORE THAN 2)**

**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

### **Supporting Electives (cont'd)\***

**MATH-165** Calculus I  
**MATH-166** Calculus II  
**MATH-261** Multivariate Calculus  
**MATH-266** Differential Equations