

# Sample Four Year Plan

# **Computer Science (BS)**

# **Semester 1**

- TRU 120: First Year Seminar (3 cr)
- CS 100: Computer Science Seminar (1 cr)
- CS 180: Foundations of Computer Science I (4 cr)
- MATH 198: Analytic Geometry and Calculus I (5 cr)
- Elementary Foreign Language I (\*\*) (3 cr)

(\*\*) = Foreign Language: Can be taken any semester, but Elementary II proficiency is required for BS degree.

#### **Semester 3**

- CS 250: Systems Programming (3 cr)
- CS 260: Object-Oriented Programming and Design (3 cr)
- CS 291: Models of Computation (or later) (3 cr)
- Dialogues Curriculum course (3-6 cr)

## **Semester 5**

- CS XXX: One elective from Area A, B, or C (\*\*\*) (3 cr)
- JINS 3XX: WE/\_\_\_\_\_ (3 cr)
- BS Requirement (3 cr)
- Dialogues Curriculum course (3-6 cr)

#### **Semester 7**

- CS 495: Senior Computer Science Seminar (1 cr)
- CS XXX: One or two electives from Area A, B, or C (\*\*\*) (3 cr)
- Elective (3 cr)
- BS Requirement (3 cr)
- Dialogues Curriculum course (3-6 cr)

#### **Semester 2**

- CS 181: Foundations of Computer Science II (3 cr)
- CS 191: Computing Structures (3 cr)
- MATH 263: Analytic Geometry and Calculus II (4 cr), **OR** Could consider CS 291: Models of Computation (3 cr), **OR** STAT 290: Statistics (3 cr)
- Elementary Foreign Language II (\*\*) (3 cr)
- Dialogues Curriculum course (3 cr)

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### Semester 4

- CS 310: Data Structures and Algorithms (3 cr)
- CS 330: Computer Architecture and Organization (3 cr)
- CS 291: Models of Computation (3 cr), **OR** STAT 290: Statistics (3 cr)
- Dialogues Curriculum course (3 cr)
- Required Support Course (3 cr)

#### Semester 6

- CS XXX: One elective from Area A, B, or C (\*\*\*) (3 cr)
- CS 345: WE/Cyberethics (3 cr)
- STAT 290: Statistics (3 cr)
- Elective (3 cr)
- Dialogues Curriculum course (3 cr)

#### Semester 8

- CS XXX: One or two electives from Area A, B, or C (\*\*\*) (3 cr)
- CS 495: Senior Computer Science Seminar (if not taken semester 7) (1 cr)
- Elective(s) (3-6 cr)
- Dialogues Curriculum course (3-6 cr) Electives to total at least 120 hours

#### **NOTES:**

- (\*\*) = Foreign Language: Can be taken any semester, but Elementary II proficiency is required for BS degree.
- (\*\*\*) = We offer topics courses regularly in Areas A, B, and C (3 cr):
  - Area A courses include CS 315: Internet Programming, CS 370: WE/Software Engineering, and CS 430: Database Systems.
  - Area B courses include CS 390: Operating Systems, CS 420: Compilers, CS 435: Parallel and Distributed Processing, CS 455: Computer Security Fundamentals, and CS 470: Computer Networks.
  - Area C courses include CS 325: Introduction to Bioinformatics, CS 380: WE/Programming Languages, CS 420: Compilers, 430: Database Systems, CS 435: Parallel and Distributed Processing, CS 455: Computer Security Fundamentals, CS 460: Computer Graphics, CS 480: WE/Artificial Intelligence, and CS 490: Automata Theory and Formal Languages.

- WE = Writing Enhanced course
- If you have not completed the Civics Exam, we recommend doing so in your **first year**.
- Truman students are required to complete a <u>Portfolio</u> to graduate. We recommend starting to compile your work for the Portfolio sooner than later.
- Students must complete their Application to Graduate **the semester prior to graduating**. Apply to graduate through TruView.
- Graduating seniors need to complete their seniors test and questionnaire. We recommend reviewing the <u>Assessment & Testing page</u> to plan accordingly.
- **The Dialogues curriculum** requires a certain number of courses/credit hours in the following Perspectives: Social, Arts and Humanities, STEM, Communications, and Statistics. The exact number of courses a student will be required to take during their undergraduate career varies individually according to the credit transferred in.

**Department Chair:** Please contact the <u>Center for Academic Excellence</u> with any updates to the plan above. Rev. 7-30-24