## College of Science and Mathematics Department of Computer Science

BS COMPUTER SCIENCE 2013-14, CSUF

| Type | Course | Units | Class | Prerequisite | Grade |
| :---: | :---: | :---: | :--- | :--- | :--- |
| Core | CSCI 40 | 4 | Intro to Programming and Problem Solving | ELM/ Trigonometry |  |
| Core | CSCI 41 | 4 | Intro to Data Structures | CSCI 40 |  |
| Core | CSCI 60 | 4 | Foundation of Computer Science | CSCI 40 (Concurrent) |  |
| Core | CSCI 112 | 4 | Intro to Computer Systems | CSCI 41, 60 |  |
| Core | CSCI 113 | 4 | Intro to Computer Organizations | CSCI 41 |  |
| Core | CSCI 115 | 4 | Algorithms and Data Structures | CSCI 41, 60; Math 75 |  |
| Core | CSCI 117 | 4 | Structures of Programming Languages | CSCI 41, 60 |  |
| Core | CSCI 119 | 4 | Intro to Finite Automata | CSCI 41, 60 | CSCI 115 |
| Elective | CSCI 124 | 3 | Intro to File Processing | CSCI 124 |  |
| Elective | CSCI 126 | 3 | Database Systems | CSCI 115 |  |
| Elective | CSCI 130 | 3 | Web Programming | CSCI 112, 115, 119 |  |
| Elective | CSCI 134 | 3 | Compiler Design | CSCI 41, 112 or ECE 118 |  |
| Core | CSCI 144 | 3 | Intro to Operating Systems | CSCI 113, 144 |  |
| Elective | CSCI 146 | 3 | Systems Architecture | CSCI 41 |  |
| Elective | CSCI 148 | 3 | Systems Programming | CSCI 150 |  |
| Elective | CSCI 150 | 3 | Intro to Software Engineering | CSCI 41, 60, Math 75 |  |
| Elective | CSCI 152S | 3 | Software Engineering | CSCI 144 or w/permission) |  |
| Elective | CSCI 154 | 3 | Simulation | CSCI 117 |  |
| Elective | CSCI 156 | 3 | Internetworking Systems and Protocols |  |  |
|  | ECE 146 | 3 | Computer Networking and Distributed Process | CSCI 60, 113 |  |
| Elective | CSCI 164 | 3 | Artificial Intelligence Programming | CSCI 164 |  |
| Elective | CSCI 166 | 3 | Principals of Artificial Intelligence | CSCI 41,112 or ECE 118, Math 76 |  |
| Elective | CSCI 172 | 3 | Computer Graphics | CSCI 172 |  |
| Elective | CSCI 173 | 3 | Advance Computer Graphics | CSCI 115, 119 |  |
| Elective | CSCI 174 | 3 | Design and Analysis of Algorithms | CSCI 113, 144 |  |
| Elective | CSCI 176 | 3 | Parallel Processing | CSCI 113, 144 |  |
| Elective | CSCI 177 | 3 | Distributed Computer Systems | CSCI 119 |  |
| Elective | CSCI 186 | 3 | Formal Languages and Automata |  |  |
| Elective | CSCI 188 | 3 | Intro to Computability |  |  |
| Elective | CSCI 191T | $1-3 ; ~ m a x ~ 6 ~$ | Proseminar | Project |  |
| Elective | CSCI 198 | 3 |  |  |  |
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## Requirements for the CSCI Major (Does not include GE)

*LINE 1: Complete 9 core courses ( 35 units)
CSCI $40,41,60,112,113,115,117,119,144$
*LINE 2: Complete 1 approved sequence
Select from: CSCI 124 \& 126, 144 \& 146, 144 \& 148, 150 \& 152, 156 \& ECE 146, 164 \& 166, 172 \& 173, 176 \& 177, 186 \& 188
*LINE 3: Complete 7 elective courses (include Line 2)
Select from: CSCI 124, 126, 130, 134, 146, 144, 148, 150, 152, 154,156, 164, 166, 172, 173, 174, 176, 177, 186, 188, 191T (max total 6 units)
*LINE 4: Complete CSCI 198 or a second course in another approved sequence
*ADD'I REQ: Complete the following additional courses
*Math 75 \& 76, Phys 2A \& 2B or Phys 4A \& 4AL \& 4B \& 4BL
( 6 units of these additional requirements courses may also be used in GE)
(This sheet is for informational purposes only. Refer to the University Catalogue for details.)

