# COMPUTER SCIENCE MAJOR <br> PROGRAM REQUIREMENTS (360 UNITS) 



Sample Course Schedule

## B.S. IN COMPUTER SCIENCE

Note: For Students with AP Computer Science or College Credit in Introductory Programming and AP Calculus, AB or college credit for Calculus I.

## YEAR 1: FALL

| COURSE | UNITS | COURSE NAME |
| :--- | :---: | :--- |
| $07-128$ | 3 | First Year Immigration Course |
| $07-131$ | 2 | Great Practical Ideas for Computer Scientists |
| $15-122$ | 12 | Principles of Imperative Computation |
| $15-151$ | 12 | Mathematical Foundations for Computer Science |
| $21-122$ | 10 | Integration and Approximation |
| $76-101$ | 9 | Interpretation and Argument |

YEAR 1: SPRING

| COURSE | UNITS | COURSE NAME |
| :--- | :---: | :--- |
| $15-150$ | 12 | Principles of Functional Programming |
| $15-213$ | 12 | Introduction to Computer Systems |
| $21-266$ | 10 | Vector Calculus for Computer Scientists |
| xx-xxx | 9 | Science/Engineering Course |
| $x x-x x x$ | 9 | Humanities and Arts Elective |

YEAR 2: FALL (sophomore)

| COURSE | UNITS | COURSE NAME |
| :--- | :---: | :--- |
| $15-251$ | 12 | Great Ideas in Theoretical CS |
| $21-241$ | 11 | Matrices and Linear Transformations |
| xx-xxx | 9 | Science/Engineering Course |
| $x x-x X x$ | 9 | Humanities and Arts Elective |
| $x X-x X x$ | 9 | Minor Requirement/Free Elective |

YEAR 2: SPRING

| COURSE | UNITS | COURSE NAME |
| :--- | :---: | :--- |
| $15-210$ | 12 | Parallel and Sequential Data Structures and Algorithms |
| xx-xxx | $9 / 12$ | Probability Course |
| $x x-x x x$ | 9 | Science/Engineering Course |
| $x x-x x x$ | 9 | Humanities and Arts Elective |
| $x x-x x x$ | 9 | Minor Requirement/Free Elective |

YEAR 3: FALL (unNor)

| COURSE | UNITS | COURSE NAME |
| :--- | :---: | :--- |
| $15-451$ | 12 | Algorithm Design and Analysis |
| xx-xxx | $9 / 12$ | Computer Science: Constrained Elective |
| $x x-x x x$ | 9 | Technical Communications Course |
| $x x-x x x$ | 9 | Humanities and Arts Elective |
| $x x-x x x$ | 9 | Minor Requirement/Free Elective |

YEAR 3: SPRING

| COURSE | UNITS | COURSE NAME |
| :--- | :---: | :--- |
| $\mathrm{Xx}-\mathrm{xxx}$ | $9 / 12$ | Computer Science: Constrained Elective |
| $\mathrm{xx}-\mathrm{xXx}$ | 9 | School of Computer Science Elective |
| $\mathrm{Xx}-\mathrm{xxx}$ | 9 | Science/Engineering Course |
| $\mathrm{xx-xxx}$ | 9 | Humanities and Arts Elective |

YEAR 4: FALL (sENIor)

| COURSE | UNITS | COURSE NAME |
| :--- | :---: | :--- |
| xx-xxx | $9 / 12$ | Computer Science: Constrained Elective |
| $x x-x X x$ | 9 | School of Computer Science Elective |
| $x x-x x x$ | 9 | Humanities and Arts Elective |
| $x x-x x x$ | 9 | Minor Requirement/Free Elective |

## YEAR 4: SPRING

| COURSE | UNITS | COURSE NAME |
| :--- | :---: | :--- |
| xX-xXx | $9 / 12$ | Computer Science: Constrained Elective |
| $x x-x x x$ | 9 | Humanities and Arts Elective |
| $x x-x x x$ | 9 | Minor Requirement/Free Elective |
| $x x-x x x$ | 9 | Minor Requirement/Free Elective |

