

| CSE Course Cat # | Course Name                                         | Fall 15 | Sp 16 | Sum 16 | Fall 16 | Spr 17 | Sum 17 | Fall 17 | Spr 18 | Sum 18 | Fall 18 | Spr 19 | Sum 19 |
|------------------|-----------------------------------------------------|---------|-------|--------|---------|--------|--------|---------|--------|--------|---------|--------|--------|
| 1340             | Introduction to Computing Concepts                  | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 1341             | Principles of Computer Science                      | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 1342             | Programming Concepts                                | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 2240             | Assembly Language Programming and Machine Org       | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 2341             | Data Structures                                     | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 2353             | Discrete Computational Structures                   | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 3330             | Database Concepts                                   | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 3339             | Information Assurance and Security                  | X       |       | -      | X       |        | -      | X       |        | -      | X       |        | -      |
| 3342             | Programming Languages                               | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 3345             | Graphical User Interface Design and Implementatio   | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 3353             | Fundamentals of Algorithms                          | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 3365             | Introduction to Scientific Computing                | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 3381             | Digital Logic Design                                | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 4340             | Statistical Methods for Engineers and Applied Scier | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 4344             | Computer Networks and Distributed Systems           | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 4345             | Software Engineering Principles                     | X       | -     | -      | X       | -      | -      | X       | -      | -      | X       | -      | -      |
| 4351             | Senior Design I                                     | X       | -     | -      | X       | -      | -      | X       | -      | -      | X       | -      | -      |
| 4352             | Senior Design II                                    |         | X     | -      |         | X      | -      |         | X      | -      |         | X      | -      |
| 4360             | Technical Entrepreneurship                          | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 4381             | Digital Computer Design                             | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 5/7111           | Intellectual Property and Info Technology           |         | X     |        |         | X      |        |         | X      |        |         | X      |        |
| 5/7313           | Software Configuration Management                   | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 5/7314           | Software Testing and Quality Assurance              | X       | -     | -      | X       | -      | -      | X       | -      | -      | X       | -      | -      |
| 5/7316           | Software Requirements                               | X       | -     | -      | X       | -      | -      | X       | -      | -      | X       | -      | -      |
| 5/7317           | Leadership for Architecting Software Systems        | X       | -     | -      | X       | -      | -      | X       | -      | -      | X       | -      | -      |
| 5/7319           | Software Architecture and Design                    | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 5/7320           | Artificial Intelligence                             | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 5/7323           | Mobile Sensing and Learning                         |         |       |        | X       |        |        |         |        |        | X       |        |        |
| 5/7330           | File Organization and Database Management           | X       | -     | -      | X       | -      | -      | X       | -      | -      | X       | -      | -      |
| 5/7331           | An Introduction to Data Mining and Related Topics   | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 5/7337           | Information Retrieval and Web Search                | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 5/7338           | Security Economics                                  | X       |       | -      | X       |        | -      | X       |        | -      | X       |        | -      |
| 5/7339           | Computer System Security                            | X       | -     | -      | X       | -      | -      | X       | -      | -      | X       | -      | -      |
| 5/7340           | Service-Oriented Computing                          |         |       | -      |         |        | -      |         |        | -      |         |        | -      |
| 5/7341           | Compiler Construction                               |         |       | -      |         |        | -      |         |        | -      |         |        | -      |
| 5/7342           | Concepts of Language Theory & Their Applications    |         |       |        |         |        |        |         |        |        |         |        |        |
| 5/7343           | Operating Systems and System Software               | X       | X     | X      | X       | X      | X      | X       | X      | X      | X       | X      | X      |
| 5/7344           | Computer Networks and Distributed Systems II        | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |

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| 5/7345           | Advance Application Programming                | X       | -     | -      | X       | -      | -      | X       | -      | -      | X       | -      | -      |
| 5/7346           | Cloud Computing                                | X       | -     | -      | X       | -      | -      | X       | -      | -      | X       | -      | -      |
| 5/7347           | XML and the Enterprise                         | -       | -     | -      | -       | -      | -      | -       | -      | -      | -       | -      | -      |
| 5/7348           | Internetworking Protocols and Programming      | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 5/7349           | Data and Network Security                      | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 5/7350           | Algorithm Engineering                          | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 5/7356           | VLSI Design and Laboratory                     | -       | -     | -      | -       | -      | -      | -       | -      | -      | -       | -      | -      |
| 5/7359           | Software Security                              | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 5/7369           | Hardware Security and Trojan Detection         | X       | -     | -      | X       | -      | -      | X       | -      | -      | X       | -      | -      |
| 5/7380           | VLSI Algorithms                                | -       | -     | -      | -       | X      | -      | -       | -      | -      | -       | X      | -      |
| 5/7381           | Computer Architecture                          | X       | X     | -      | X       | X      | -      | X       | X      | -      | X       | X      | -      |
| 5/7382           | Computer Graphics                              | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 5/7385           | Microcontroller Architecture and Interfacing   | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 5/7387           | Digital Systems Design                         | X       | -     | -      | X       | -      | -      | X       | -      | -      | X       | -      | -      |
| 5360             | Introduction to 3-D Animation                  | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 7312             | Software Systems Engineering                   | -       | -     | -      | -       | -      | -      | -       | -      | -      | -       | -      | -      |
| 7315             | Software Project Planning and Management       | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 8098             | Computer Science Seminars                      | -       | X     | -      | X       | X      | -      | -       | X      | -      | X       | X      | -      |
| 8312             | Software Generation and Maintenance            | -       | -     | -      | -       | -      | -      | -       | -      | -      | -       | -      | -      |
| 8313             | Object-Oriented Analysis and Design            | X       | -     | -      | X       | -      | -      | X       | -      | -      | X       | -      | -      |
| 8314             | Software Metrics and Quality Engineering       | -       | -     | -      | -       | -      | -      | X       | -      | -      | -       | -      | -      |
| 8315             | Software Acquisition Legal and Economic Issues | -       | -     | -      | -       | -      | -      | -       | -      | -      | -       | -      | -      |
| 8316             | User Interface Design                          | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 8317             | Software Reliability and Safety                | -       | -     | -      | -       | X      | -      | -       | -      | -      | -       | X      | -      |
| 8331             | Data Mining                                    | -       | -     | -      | X       | -      | -      | -       | -      | -      | X       | -      | -      |
| 8340             | Advanced Topics in Software Engineering        | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 8343             | Advanced Operating Systems                     | X       | -     | -      | X       | -      | -      | X       | -      | -      | X       | -      | -      |
| 8344             | Computer Networks                              | X       | -     | -      | X       | -      | -      | X       | -      | -      | X       | -      | -      |
| 8349             | Advanced Network and System Security           | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 8350             | Algorithms II                                  | -       | X     | -      | -       | -      | -      | -       | X      | -      | -       | -      | -      |
| 8351             | Computer Arithmetic                            | -       | X     | -      | -       | X      | -      | -       | X      | -      | -       | X      | -      |
| 8353             | Digital Forensics                              | -       | -     | -      | -       | -      | -      | -       | -      | -      | -       | -      | -      |
| 8355             | Graph Theory Algorithms and Applications       | -       | -     | -      | X       | -      | -      | -       | -      | -      | X       | -      | -      |
| 8356             | Border and Transportation Security             | -       | -     | -      | -       | -      | -      | -       | -      | -      | -       | -      | -      |
| 8358             | Information Structures                         | -       | -     | -      | -       | -      | -      | -       | -      | -      | -       | -      | -      |
| 8359             | Advanced Software Security                     | -       | -     | -      | -       | -      | -      | -       | -      | -      | -       | -      | -      |
| 8377             | Fault-Tolerant Computation                     | X       | -     | -      | X       | -      | -      | X       | -      | -      | X       | -      | -      |
| 8381             | Quantum Logic and Computing                    | -       | -     | -      | -       | -      | X      | -       | -      | -      | -       | -      | X      |

| CSE Course |                                                   |         |       |        |         |        |        |         |        |        |         |        |        |
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| 8383       | Advanced Computer Architecture                    |         | -     | -      |         | -      | -      |         | -      | -      |         | -      | -      |
| 8386       | Testing of VLSI Circuits                          |         | -     |        |         | -      | -      |         | -      |        |         | -      | -      |
| 8387       | Switching Theory and Applications in VLSI CAD     |         |       | -      | X       |        |        |         |        | -      | X       |        |        |
| 8388       | Embedded Computing System Design                  |         |       |        |         |        |        |         |        |        |         |        |        |
| 8389       | Foundations of Formal Verification and Validation |         | X     | -      |         | -      | -      |         | X      | -      |         | -      | -      |