

Sample Four-Year BSES Curriculum

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| Semester 1 | Units | Semester 2 | Units |
| ES 110: Intro. Engg. & Lab Experience | 2 | PHYS 114: Intro. to Physics I (GE B1) | 4 |
| CS 115: Programming I (GE B3) | 4 | PHYS 116: Intro. to Lab Experience (GE B1) | 1 |
| MATH 142E: Discrete Math for Engg. (or Math 142: Discrete Math I) | 2 | MATH 211: Calculus II | 4 |
| MATH 161: Calculus I (GE B4) | 4 | GE | 6 |
| ENGL 101: Exp. Writ. & Analy. Read. (GE A2) | 3 | Total | 15 |
| Total | 15 | | |
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| Semester 3 | | Semester 4 | |
| PHYS 214: Introduction to Physics II | 4 | ES 210: Digital Circuits & Logic Design | 4 |
| ES 220: Electric Circuits | 3 | ES 230: Electronic I | 3 |
| ES 221: Electric Circuits Laboratory | 1 | ES 231: Electronics I Laboratory | 1 |
| MATH 241: Calculus III | 4 | ES 400: Linear Systems Theory | 3 |
| GE | 6 | GE | 6 |
| Total | 18 | Total | 17 |
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| Semester 5 | | Semester 6 | |
| ES 314: Adv. Prog. Mod. and Sim. | 4 | ES 310: Microprocessors & System Design | 4 |
| ES 330: Electronics II (w/lab) | 3 | ES 441: Analog & Digital Commun. II | 3 |
| ES 440: Analog & Digital Commun. I | 3 | ES 430: Electromag. Theo. & Applications | 3 |
| MATH 261: Calculus IV | 4 | GE | 6 |
| MATH 345: Probability Theory | 4 | Total | 16 |
| Total | 18 | | |
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| Semester 7 | | Semester 8 | |
| ES 443: Intro. Optical Fiber Commun. | 3 | ES 493: Senior Design Project | 3 |
| ES 465: Introduction to Networking | 3 | Approved Technical Elective I | 3 |
| ES 492: Senior Design Project Planning | 2 | Approved Technical Elective II | 3 |
| ES 497: Engg. Science Colloquium | 1 | GE | 6 |
| GE | 9 | Total | 15 |
| Total | 18 | | |

Total Graduation Units: 132