| WESTCHESTER COMMUNITY COLLEGE |  |  |  |  | NEW YORK INSTITUTE OF TECHNOLOGY |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degree: | A.S. |  |  |  | Degree: | B.S. |  |  |
| Program of Study: |  | Computer Science |  |  |  | gram of Stu | Computer Science |  |  |
| Course Prefix | Course <br> Number | Title | Cr. | $\sqrt{ }$ | Course Prefix | Course <br> Number | Title | Cr. | CR. APPLY TO 4 YR. DEGREE |
| CORE REQUIREMENTS |  |  |  |  |  |  |  |  |  |
| ENG | 101 | Writing and Research | 3 |  | FCWR | 101 | Writing I | 3 | 3 |
| ENG | 102 | Writing and Literature | 3 |  | FCWR | 151 | Writing II | 3 | 3 |
|  |  | Mathematics, must take all 3 courses as follows: | 11 |  |  |  |  |  |  |
| COMSC | 210 | Discrete Structures for Computer Science |  |  | CSCl | 235 | Elements of Discrete Structures | 3 | 3 |
| MATH | 181 | Calculus 1 |  |  | MATH | 170 | Calculus I | 4 | 4 |
| MATH | 191 | Calculus 2 |  |  | MATH | 180 | Calculus II | 4 | 4 |
|  |  | Natural Sciences - select ONE of the following PAIRS of courses: | 8 |  |  |  | Natural Sciences Equivalents | 8 | 8 |
| BIOL | 115 | General Biology 1 (and Lab) and (Recommended) |  |  | BIOL | 110 | General Biology I |  |  |
| BIOL | 117 | General Biology 2 (and Lab) |  |  | BIOL | 150 | General Biology II -OR- |  |  |
|  |  |  |  |  |  |  |  |  |  |
| BIOL | 121 | Anatomy and Physiology 1 (and Lab) and |  |  |  |  |  |  |  |
| BIOL | 123 | Anatomy and Physiology 2 (and Lab) |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| CHEM | 107 | Inorganic Chemistry 1 (and Lab) and (Recommended) |  |  | CHEM | 110 | General Chemistry I |  |  |
| CHEM | 111 | Inorganic Chemistry 2 (and Lab) |  |  | CHEM | 150 | General Chemistry II -OR- |  |  |
|  |  |  |  |  |  |  |  |  |  |
| CHEM | 201 | Organic Chemistry 1 (and Lab) and |  |  |  |  |  |  |  |
| CHEM | 205 | Organic Chemistry 2 (and Lab) |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| PHYSC | 111 | College Physics 1 (plus required lab and workshop) and |  |  |  |  |  |  |  |
| PHYSC | 112 | College Physics 2 (plus required lab and workshop) |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| PHYSC | 121 | Engineering Physics 1 (and Lab) and (Recommended) |  |  | PHYS | 170 | General Physics I |  |  |
| PHYSC | 122 | Engineering Physics 2 (and Lab) |  |  | PHYS | 180 | General Physics II |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  | Social Sciences- Recommended - PSYCH, SOC, or ANTHR | 3 |  | ICBS | ELEC | Behavioral Science Seminar* | 3 | 3 |
|  |  | Select a course from ONE of the following categories: | 3 |  | LAEL | ELEC | Liberal Arts Elective | 3 | 3 |
|  |  | The Arts, see SUNY Gen Ed Courses |  |  |  |  |  |  |  |
|  |  | Foreign Languages, see SUNY Gen Ed Courses |  |  |  |  |  |  |  |
|  |  | Other World Civilizations, see SUNY Gen Ed Courses |  |  |  |  |  |  |  |
|  |  | Select a course from ONE of the following categories: | 3 |  | GEEL | ELEC | General Elective | 3 | 3 |
|  |  | American History, see SUNY Gen Ed Courses |  |  |  |  |  |  |  |
|  |  | Western Civilization, see SUNY Gen Ed Courses |  |  |  |  |  |  |  |
| DEGREE REQUIREMENTS |  |  |  |  |  |  |  |  |  |
| COMSC | 101 | Computer Programming 1 | 4 |  | CSCl | 125 | Computer Programming I and MATH | 4 | 4 |
| COMSC | 110 | Computer Programming 2 | 4 |  | CSCI | 185 | Computer Programming II and MATH | 4 | 4 |
| COMSC | 201 | Data Structures | 4 |  | CSCl | 260 | Data Structures and MATH Elective (2 | 4 | 4 |
| COMSC | 207 | Java Programming | 4 |  | ETCS | 108 | Computer, Internet and Society* and | 4 | 4 |
| COMSC | 217 | Computer Architecture | 4 |  | CSCl | 155 | Computer Org and Architecture and 1 | 4 | 4 |
|  |  | and select TWO courses from the following: | 6 |  |  |  | Select TWO equivalent courses: | 6 | 6 |
| CIVIL |  | Civil Technology - Any Course |  |  |  |  |  |  |  |
| COMSC | 106 | IT Essentials 1: PC Hardware and Software |  |  |  |  |  |  |  |
| COMSC | 116 | LINUX Operating System |  |  | CSCl | 330 | Operating Systems |  |  |
| COMSC | 118 | Introduction to Networks (CCNA1) |  |  | CSCI | 345 | Computer Networks |  |  |
| COMSC | 120 | Internship in Computer Science |  |  | ETCS | 365 | Engineering \& Com Sci Internship |  |  |
| COMSC | 121 | IT Essentials 2: NOS |  |  |  |  |  |  |  |
| COMSC | 123 | Home Technology Integration |  |  |  |  |  |  |  |
| COMSC | 124 | Routing \& Switching Essentials (CCNA2) |  |  | CSCI | 357 | Cisco Academy Level I |  |  |
| COMSC | 128 | Scaling Networks (CCNA3) |  |  |  |  |  |  |  |
| COMSC | 130 | Voice Over IP |  |  |  |  |  |  |  |
| COMSC | 132 | Connecting Networks (CCNA4) |  |  |  |  |  |  |  |
| COMSC | 134 | Network Administration |  |  |  |  |  |  |  |
| COMSC | 136 | Advanced Routing Configuration |  |  |  |  |  |  |  |
| COMSC | 138 | Remote Access |  |  |  |  |  |  |  |
| COMSC | 142 | Network Security (CS) |  |  | CSCl | 385 | Network and Internet Security |  |  |
| COMSC | 145 | Intro to Computer Forensics |  |  |  |  |  |  |  |
| COMSC | 208A | GUI Development |  |  |  |  |  |  |  |
| COMSC | 214 | Web Programming |  |  | CSCl | 360 | Web Site Engineering |  |  |
| ELEC |  | Electrical Technology - Any Course |  |  |  |  |  |  |  |
| MATH | 215 | Linear Algebra |  |  | MATH | 310 | Linear Algebra |  |  |
| MATH | 230 | Calculus 3 |  |  | MATH | 260 | Calculus III |  |  |
| MATH | 240 | Differential Equations |  |  | MATH | 320 | Differential Equations |  |  |
| MECH |  | Mechanical Technology - Any Course |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| \| TOTAL |  |  | 60 |  |  |  |  | 60 | 60 |
|  |  | NOTES: |  |  |  |  |  |  |  |
| SUNY WCC general education "gen. ed." course options are located at https://catalog.sunywcc.edu/preview_program.php?catoid=42\&poid=3796 |  |  |  |  |  |  |  |  |  |
| NYIT: Grade of C- or higher is required to receive transfer credit for major courses |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | New York Tech 2021-22 Catalog |  |  |

