

Central Virginia Tech Prep Consortium

Contact the consortium director or your school guidance counselor for more information

Physical and Natural Sciences: Science (AS)

| Subjects | SECONDARY (High School) | | | | POSTSECONDARY (Piedmont Virginia Community College) | | | | |
|--------------------------------|---|----------------------------|---|---|---|---|---------------------------|--------------------------------|--|
| | Freshman | Sophomore | Junior | Senior | Freshman A | Freshman B | Summer | Sophomore A | Sophomore B |
| Math | Algebra I (3130) | Geometry (3143) | Algebra II (3135) | Adv. Algebra/Trig. (3137) | Math Elective (MTH)** | Math Elective (MTH)** | | Math/Science Elective | |
| | Geometry (3143) | Algebra II (3135) | Adv. Algebra/Trig. (3137) | Pre-Calculus w/Trig (MTH 166)** Applied Calculus (MTH 271)** | | | | | |
| English | English 9 (1130) | English 10 (1140) | English 11 (1150) | English 12 (1160) | College Comp. I (ENG 111)** | College Comp. II (ENG 112)** | | | |
| | | | | College Comp. I & II (ENG 111-112)** | | | | | |
| Science | Biology (4310) | Chemistry (4410) | Biology (BIO 101-102)** | College Physics (PHY 201-202)** | Science and Lab** | Science and Lab** | | Science and Lab** | Science and Lab** |
| | | | | | | | Science and Lab | Science and Lab | |
| Social Studies/ Humanities | World Geography (2210) or World History (2340) | | VA/US History (2360) | VA/US Gov. (2440) | US History I (HIS 121)** or History of Western Civilization I (HIS 101) | US History II (HIS 122)** or History of Western Civilization II (HIS 102) | | Humanities Elective | Humanities Elective |
| | | | US History (HIS 121-122)** | US Government (PLS 211-212)** | | | Social Science Elective** | | |
| Health/PE | P.E. (7305) | P.E. (7405) | | | | | | Health / PE Elective (HLT/PED) | Health/PE Elective (HLT/PED) |
| Career and Technical Education | Technology Foundations (8403) | Technology Transfer (8405) | | | | | | | |
| | Keyboarding (6151) or Keyboarding Apps. (6152)* | | Computer Information Systems (6612/6613)* | | | Computer Applications and Concepts (ITE 115)* | | | Independent Study in Science Elective (BIO,/CHM 299) |
| Other | | | | | Orientation (SDV 101) | | | | |

It is recommended that Tech Prep students maintain a career portfolio, and obtain field experience (i.e. observation, shadowing, internship, mentorship, etc.) as a high school Junior and/or Senior.

* Articulated 6 Credits ** Dual Enrollment 33 Credits

Central Virginia Tech Prep Consortium

Contact the consortium director or your school guidance counselor for more information

Physical and Natural Sciences: Biotechnology (AS)

| Subjects | SECONDARY (High School) | | | | POSTSECONDARY (Piedmont Virginia Community College) | | | | |
|--------------------------------|---|------------------------------------|----------------------------|--|--|---|--------|--|--|
| | Freshman | Sophomore | Junior | Senior | Freshman A | Freshman B | Summer | Sophomore A | Sophomore B |
| Math | Algebra I (3130) | Geometry (3143) | Algebra II (3135) | Adv. Algebra/Trig. (3137) | Pre-Calculus (MTH 163)** | | | Statistics (MTH 240) or Elem. Statistics (MTH 157) or Applied Calculus (MTH 271) ** | |
| | Geometry (3143) | Algebra II (3135) | Adv. Algebra/Trig. (3137) | Pre-Calculus (MTH 163)** Applied Calculus (MTH 271)** | | | | | |
| English | English 9 (1130) | English 10 (1140) | English 11 (1150) | English 12 (1160) | College Comp. I (ENG 111) ** | College Comp. II (ENG 112)** | | | Humanities Elective |
| | | | | College Comp. I & II (ENG 111-112)** | | | | | |
| Science | Earth Science (4210) | Biology (4310) | Chemistry (4410) | Biology I & II (BIO 101-102)** | College Chemistry I with Laboratory (CHM 111) | College Chemistry II with Laboratory (CHM 112) | | | |
| Social Studies | World Geography (2210) or World History (2340) | | VA/US History (2360) | VA/US Gov. (2440) | US History I (HIS 121)** or History of Western Civilization I (HIS 101) | US History II (HIS 122) ** or History of Western Civilization II (HIS 102) | | | Social Science Elective** |
| | | | US History (HIS 121-122)** | US Government (PLS 211-212)** Principles of Sociology (SOC 200)** | | | | | |
| Health/PE | P.E. (7305) | P.E. (7405) | | | | | | Health/PE Elective (HLT/PED) | Health/PE Elective (HLT/PED) |
| Career and Technical Education | | Computer Info Systems (6612/6613)* | | | General Biology I with Laboratory (BIO 101) ** | General Biology II with Laboratory (BIO 102) ** | | Protein Research with Laboratory (BIO 251) | DNA Research with Laboratory (BIO 252) |
| | Keyboarding (6151) or Keyboarding Apps. (6152)* | | | | Orientation (SDV 101) | Introduction to Biotechnology Careers (BIO180) | | Microbiology with Laboratory (NAS 185) | |

| | | | | | | | | | |
|-------|--|--|------------------------|-----------------------------|--|---------------------------------|--|---|------------------------------|
| Other | | | Fund. of Speech (1300) | Business Management (6135)* | | Biotechnology Methods (BIO 170) | | Computer Applications and Concepts (ITE 115)* | Bio Medical Ethics (PHI 227) |
|-------|--|--|------------------------|-----------------------------|--|---------------------------------|--|---|------------------------------|

* Articulated ** Dual Enrollment 29 Credits

Central Virginia Tech Prep Consortium

Contact the Consortium Director or your school guidance counselor for more information

Engineering (AS)

| Subjects | SECONDARY (High School) | | | | POSTSECONDARY (Piedmont Virginia Community College) | | | | |
|--------------------------------|--|----------------------------------|--------------------------------------|--------------------------------------|--|--|--------|------------------------------------|---------------------------------|
| | Freshman | Sophomore | Junior | Senior | Freshman A | Freshman B | Summer | Sophomore A | Sophomore B |
| Math | Algebra I (3130) | Geometry (3143) | Algebra II (3135) | Adv. Algebra/Trig. (3137) | Calculus with Analytic Geometry I (MTH 173)** | Calculus with Analytical Geometry II (MTH 174)** | | Multivariable Calculus (MTH 275)** | |
| | Geometry (3143) | Algebra II (3135) | Advance Algebra/Trig. (3137) | Multi variable Calculus (MTH 275)** | | | | | |
| | | | Calculus with I & II | Analytic Geometry (MTH 173-174)** | | | | | |
| English | English 9 (1130) | English 10 (1140) | English 11 (1150) | English 12 (1160) | College Comp. I (ENG 111)** | College Comp. II (ENG 112)** | | | |
| | | | | College Comp. I & II (ENG 111-112)** | | | | | |
| Science | Earth Science (4210) | Biology (4310) | Chemistry (4410) | Physics (4510) | College Chemistry I (CHM 111) | | | University Physics I (PHY 241) | University Physics II (PHY 242) |
| Social Studies/ Humanities | World Geography (2210) or World History (2340) | | VA/US History (2360) | VA/US Gov. (2440) | Social Science Elective** | Macroeconomics (ECO 201 or | | Humanities Elective | Humanities Elective |
| | | | | US History I-II (HIS 121-122)** | | Social Science Elective** | | | |
| | | | | | | Humanities Elective | | | |
| Health/PE | P.E. (7305) | P.E. (7405) | | | | Health / PE Elective (HLT/PED) | | | Health / PE Elective (HLT/PED) |
| Career and Technical Education | Technology Foundations (8403) | Technical Drawing/ Design (8435) | Engineering Drawing & Design (8436)* | Introduction to Engineering | Introduction to Engineering (EGR 120) | Engineering Graphics (EGR 115) | | Technical Elective | Technical Elective |

| | | | | | | | | | |
|-------|---|----------------------------|---|-----------------------|-----------------------|--|--|-------------------------------------|--|
| | Keyboarding (6151) or Keyboarding Apps. (6152)* | Technology Transfer (8405) | Computer Information Systems (6612/6613)* | Sociology (SOC 200)** | | | | Solid Mechanics (Statics) (EGR 240) | |
| Other | | | | | Orientation (SDV 101) | | | | |

It is recommended that students maintain a career portfolio and obtain field experience (i.e. observation, shadowing, internship, mentorship, etc.) as a high school Junior and/or Senior.

Student with Algebra II will need Math 166 before Math 173. CSC 110 Introduction to computing is a prerequisite for EGR 120.

* Articulated ** Dual Enrollment 29 Credits