|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Career Cluster: Engineering and Technology Education STEM | | | | | CTE Program: Stellar Academy of Engineering – Allen D. Nease High School **Engineering Pathways-9400300** | | | | |
| Career Cluster Pathway: Engineering and Technology | | | | | Industry Certification: Autodesk User-AutoCAD (ADESK002), Autodesk User-Revit (ADESK008) | | | | |
| Stellar-Nease-Logo-4c.jpg | | 16 CORE CURRICULUM CREDITS | | | | | | 8 ADDITIONAL CREDITS | |
| ENGLISH4 credits | MATH4 credits | SCIENCE3 credits, 2 with lab | | SOCIAL STUDIES3 credits | OTHER REQUIRED COURSES  **FINE ARTS** (1 credit)  **PHYSICAL EDUCATION**  (1 credit) | CAREER AND TECHNICAL EDUCATION COURSES | **RECOMMENDED ELECTIVES**  (ALIGNED WITH COMMUNITY COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS) |
| HIGH SCHOOL | Students are encouraged to use flchoices.org to explore careers and postsecondary options.  * **Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.** * **One course within the 24 credit program must be an online course. Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program** | | | | | | | | |
| 9th | English 1 or English 1 Honors | Algebra I or Geometry | Environmental Science or Biology Honors | | World History or AP World History | HOPE – Health Opportunities through Physical Education | Introduction to Engineering Design-8600550 | Elective |
| 10th | English 2 or English 2 Honors | Geometry or Algebra II | Biology | | Social Studies Elective | Fine or Practical Arts | Principles of Engineering-8600520 | Elective |
| 11th | English 3 or English 3 Honors, AP Language | Algebra II or Pre-Calculus | Chemistry, Marine Science, Earth/Space, or Physics | | American History or American History Honors or APUSH | Elective or World Language | Civil Engineering & Architecture-8600590 | Elective |
| 12th | English 4 or English 4 Honors, or AP Eng. Literature | Pre-Calculus or AP Calculus | Chemistry, Marine Science, Earth/Space, or Physics | | American Government .5 + Economics .5 or AP Economics/Government | Elective or World Language | Engineering Design & Development-8600650 | Elective |
| POSTSECONDARY | **Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.** | | | | | | | | |
| **TECHNICAL CENTER PROGRAM(S)** | | **COMMUNITY COLLEGE PROGRAM(S)** | | | | | **UNIVERSITY PROGRAM(S)** | |
| FL State College at Jacksonville: Drafting – 10 month certificate program  Seminole State College, Sanford: Computer-Aided Design Technical Certificate – 10 month program | | FL State College at Jacksonville: AutoCAD Foundations T.C., Drafting T.C.  Valencia College, Orlando: Civil/Surveying Engineering Technology Associate A.S.  Daytona State College, Daytona Beach: AutoCAD Foundations A.S. | | | | | University of N. FL, Jacksonville: Engineering – Civil, Electrical, Mechanical B.S.  University of FL, Gainesville: Engineering – Civil, Environmental, Mechanical, Architectural B.S.  University of Central FL, Orlando: Engineering -- Civil, Environmental, Electrical, Mechanical, Aerospace B.S. | |
| CAREER | **Sample Career Specialties – Careers from the Targeted Occupations List are in bold.** | | | | | | | | |
| Draftsman, Carpenter; Electrician; Heating and Air Conditioning, Mason | | Architectural Engineering Assistant, AutoCAD Technician, Draftsman | | | | | Engineer -Architecture, Civil, Structural, Transportation, Water Resources, Construction, Mechanical, Environmental, Geological, Surveyor, Draftsman | |
| CREDIT | **Articulation and CTE Dual Enrollment Opportunities** | | | | | | | | |
| **Secondary to Technical Center (PSAV)**  (Minimum # of clock hours awarded) | | **Secondary to College Credit Certificate or Degree**  (Minimum # of clock or credit hours awarded) | | | | | **PSAV/PSV to AAS or AS/BS/BAS**  (Statewide and other local agreements included here) | |
| No Articulation Agreement  No CTE Dual Enrollment | | FSCJ: 3 credits immediately awarded upon enrollment for AutoCAD certification – Architectural Design & Construction Tech major, Course CGS2470, ETD 2395 (FSCJ value of $343.56)  No CTE Dual Enrollment | | | | | No Articulation Agreement  No CTE Dual Enrollment | |
| **Career and Technical Student Association** | | | | | | | | | |
| FL – TSA - Technology Student Association | | | | | | | | | |
| **Internship/Work Experience Recommendations** | | | | | | | | | |
| Career Academy students may apply for internships at engineering firms after their junior year. | | | | | | | | | |
| **Program of Study Graduation Requirements:** <http://www.fldoe.org/workforce/perkins/pdf/POS-GradChecklist.pdf> | | | | | | | | | |