SURVEYING & CIVIL ENGINEERING TECHNOLOGY (SCVL)

SCVL1002 | Civil Drafting | Lecture/Laboratory (3 Credits)
Introduction to the fundamental aspects and production of drawings through the use of industry software with an emphasis on geometry and problems common to civil disciplines.

SCVL1111 | Introduction to Topographic Surveying | Lecture/Laboratory (3 Credits)
Introduction to the technical equipment and industry processes used by surveying technicians to collect and interpret data.

SCVL1130 | Legal Descriptions & Boundary Law | Lecture (4 Credits)
Introduction to property descriptions and land survey systems with a focus on composing and interpreting legal descriptions used in surveys.

SCVL1210 | Control & Geodetic Surveying | Lecture/Laboratory (4 Credits)
Examine the fundamentals of Control Surveys, including Global Positioning Systems, focus and its' application to the geospatial industries, as well as an in-depth study of datums and projections.
Prerequisite(s): SCVL1111

SCVL1220 | Transportation & Municipal Design | Lecture/Laboratory (4 Credits)
Utilize the principles of civil design with industry software to create elements of transportation and municipal design.
Prerequisite(s): CSBT1002 Or SCVL1002

SCVL1230 | Land Use Planning | Lecture (4 Credits)
Introduction to the planning process used to develop land with an emphasis on land use for public and private needs in a community.

SCVL1240 | Professional Development | Seminar (1 Credit)
Design of the core competencies necessary to succeed in the workforce are implemented in an individualized professional development plan. Engagement in internships, occupational simulation, and other methods of experiential study are integrated and assessed through a 360 process. Emphasis is on career preparation.

SCVL2000 | Professional Development | Directed Study (2 Credits)
Develop and implement a customized plan which identifies areas of focus to be a successful graduate. Emphasis is on completion of an internship, professional seminar(s), certification(s), or alternative project.

SCVL2111 | Materials,Testing, Construction Methods | Lecture/Laboratory (3 Credits)
Introduction to testing construction materials and methods, inspection and quality control. Examine construction documents to estimate quantities and costs for civil projects.

SCVL2120 | Utility & Construction Design | Lecture/Laboratory (4 Credits)
Utilize the principles of civil design with industry software to create elements of utility infrastructure and its' construction.
Prerequisite(s): CSBT1002 Or SCVL1002

SCVL2140 | SCVL Topics | Seminar (1 Credit)
Topics in land surveying and civil engineering presented and examined through lectures, speakers, and field trips to develop an awareness of current trends, issues, and the future of the surveying and civil design industries.

SCVL2141 | SCVL Topics - Competition | Seminar (1 Credit)
Examine topics in land surveying and civil engineering through preparation, participation, and completion of a national competition.

SCVL2142 | SCVL Topics - Service Learning | Seminar (1 Credit)
Examine topics in land surveying and civil engineering through preparation, participation, and completion of a service learning project.

SCVL2210 | Laser Scanning & Remote Sensing | Lecture/Laboratory (4 Credits)
Analyze Laser Scanning and Remote Sensing technology, including the integration of the data to surveying and civil engineering projects.
Prerequisite(s): SCVL1111

SCVL2240 | Exam Preparation | Seminar (1 Credit)
Review various categories relevant to certification and licensure exams. Emphasis will be on the topics listed to occur on the exams.

SCVL2250 | GIS | Lecture (4 Credits)
Examine the current state of the Geospatial Industry, including Geographic Information Systems(GIS) and Geospatial products.
Prerequisite(s): SCVL1111

SCVL2260 | Site & Subdivision Design | Lecture/Laboratory (4 Credits)
Utilize the principles of civil design with industry software to create elements of site design, including the design of subdivisions and study of the subdivision process.
Prerequisite(s): CSBT1002 Or SCVL1002

SCVL2300 | Adv Surveying & Construction Staking | Lecture/Laboratory (4 Credits)
Examine the fundamentals of advanced surveying methods in the field and office. Focus on field and office techniques for construction, data collection, and survey final products such as land title surveys, boundary and topographic surveys.