

➤ **PROGRAM EDUCATIONAL OBJECTIVE 1:** *Produce graduates who can function effectively as Civil Engineering technicians for Long Island and surrounding area firms.*

PROGRAM OUTCOME 1a: Graduates will develop a working knowledge of AutoCAD sufficient to develop plans, sections and elevations related to buildings, site work and structural details.					
Submit to constituents for review	Activity	Source	Assessment rubric	Interval	Responsible for data
Summary of rating sheet	Students will complete a Residential Design Project using AutoCAD	CET 111 Assessment Matrix 1 & 4	Project Rubric	2 yrs	CET 111 Instructor
Summary of rating sheet	Students will complete a Commercial Design Project using AutoCAD.	CET 211 Assessment Matrix 1 & 4	Project Rubric	2 yrs	CET 111 Instructor
Summary of Evaluation	Students will produce site plans/topo. drawings from field data using AutoCAD	CET 232	Rating Sheet	2 yrs	CET 232 Instructor
Summary of Employer Survey	Employer Survey	Questionnaire Computer Skills	Rating Sheet	2 years	CET Program Coordinator

PROGRAM OUTCOME 1b: Graduates will develop a working knowledge of both standard computer software used for office communications, research, and data analysis and industry standard software in civil engineering design and analysis.

Submit to constituents for review	Activity	SOURCE	Assessment rubric	Interval	Responsible for data
Summary of the portfolio results.	Students will complete a series of projects using the current office suite.	CET 103 Assessment Matrix 4, 5, 6, & 7	A portfolio will be maintained and assessed for each student and evaluated for acceptable working knowledge.	Yearly	Instructor
Summary of the evaluation results.	Students will perform an analysis of a steel structural members using Steel Design software	CET 223 Assessment Matrix	Rating Sheet	Yearly	Instructor
Summary of evaluation results.	Students will use standard Surveying highway software for field project.	CET 232 Assessment Matrix	Rating Sheet	Yearly	Instructor
Summary of evaluation results.	Students will use Excel and Bid Builder to estimate a project.	CET 201 Assessment Matrix 7 & 8	Rating Sheet	Yearly	Instructor

PROGRAM OUTCOME 1c: Students shall be able to use the equipment of technology such as surveying and be able to collect and evaluate data such as survey data.

Submit to constituents for review	Activity	SOURCE	Assessment rubric	Interval	Responsible for data
Summary of evaluation results	Students will gather data using total station, work with Nikon software, AutoCAD & Excel	CET 231 Assessment Matrix 7, 10, & 11	Rating Sheet	Yearly	Instructor
Summary of evaluation results	Students will gather data using total station, work with Nikon software, AutoCAD & Excel	CET 232 Assessment Matrix 8	Rating Sheet	Yearly	Instructor

➤ **OBJECTIVE 2:** *Produce graduates who will understand the importance of life-long learning and are ready to transfer to Bachelor of Engineering Technology programs to continue their education.*

PROGRAM OUTCOME 2a: Graduates will be informed on the importance of continuing their technical education through professional associations, post-degree training, and professional educational opportunities.					
Submit to constituents for review	Activity	SOURCE	Assessment rubric	Interval	Responsible for data
Summary of returned student survey results indicating % of students who continued their education.	Graduate Survey	Survey questions	Summary of Survey results	Yearly	CET Program Coordinator
Summary of % of students attending.	Students will attend one local professional society meetings/ presentation	Student commentary of meeting	Summary of Student Submissions	Yearly	CET Program Coordinator

PROGRAM OUTCOME 2b: Graduates will have developed math and physics aptitude necessary for critical thinking.

Submit to constituents for review	Activity	SOURCE	Assessment rubric	Interval	Responsible for data
PHY101/102 Summary data of SUNY Learning Goals	Lab Activity – Written Report: measurements and vector analysis	SUNY General Education Assessment Review (GEAR) Implementation Guidelines	Developed by Physics area of department	Every 2 years	Physics Area Coordinator
Math 109/111 Summary data of SUNY Learning Goals	Mathematics Exams	SUNY GEAR Assessment Review Implementation Guidelines	Developed by Math department	Every 2 years	Algebra and Pre-Calculus Coordinator
Summary of Employer Survey results	Employer Survey	Questionnaire	Satisfaction Rating	2 years	CET Program Coordinator

PROGRAM OUTCOME 2c: Graduates will have developed techniques on how to solve problems in civil engineering technology that incorporate the rigors and implementation of engineering considerations and design.

Submit to constituents for review	Activity	SOURCE	Assessment rubric	Interval	Responsible for data
Summary of Project Results	Students will demonstrate problem solving to design elements of a multi-story building.	CET 223 Assessment Matrix 10	Project Assessment Rubric	Yearly	Instructor
Summary of Examination Results	Students will demonstrate problem solving and design knowledge during written examinations.	CET 225	Examination Results	Yearly	Instructor
Summary of Project Results	Students will demonstrate problem solving to design elements of a highway.	CET 232 Assessment Matrix 4	Project Assessment Rubric	Yearly	Instructor
Summary of Examination Results	Students will demonstrate problem solving and design knowledge during written examinations.	CET240	Examination Results	Yearly	Instructor
Summary of Employer Survey results	Employer Survey	Questionnaire	Satisfaction Rating	2 years	CET Program Coordinator

- **OBJECTIVE 3:** *Produce graduates who can communicate effectively in oral and written at both technical and interpersonal levels. Produce graduates who can effectively work in a team as required by the corporate community.*

PROGRAM OUTCOME 3a: Graduates will develop the skills required to work in teams to complete lab design projects.					
Submit to constituents for review	Activity	SOURCE	Assessment rubric	Interval	Responsible for data
Summary of rating sheet	Team Design Project of Multi-story Building	CET 223 Assessment Matrix 10	Project Assessment Rubric	2 years	Instructor
Summary of rating sheet	Team Design project of a commercial building.	CET 211 Assessment Matrix 10	Project Assessment Rubric	2 years	Instructor
Summary of Graduate Survey results	Graduate Survey	Questions	Satisfaction rating	2 years	CET Program Coordinator
Summary of Employer Survey results	Employer Survey	Questionnaire	Satisfaction rating	2 years	CET Program Coordinator

PROGRAM OUTCOME 3b: Graduates will develop the writing skills necessary to demonstrate competency in technical written communication.

Submit to constituents for review	Activity	SOURCE	Assessment rubric	Interval	Responsible for data
Summary of rating sheet.	Lab Report	CET 222 Assessment Matrix 1	Laboratory Assessment Rubric	Yearly	Instructor
Summary of rating sheet.	Lab Report	CET 240 Assessment Matrix	Laboratory Assessment Rubric	Yearly	Instructor
Summary of rating sheet.	Class Exercises	ENG 111	Rating Sheet	2 years	Instructor
Summary of Employer Survey results	Employer Survey	Questionnaire	Satisfaction Rating	2 years	CET Program Coordinator

PROGRAM OUTCOME 3c: Graduates will develop the oral presentation skills to disseminate technical information from laboratory and/or design experiences.

Submit to constituents for review	Activity	SOURCE	Assessment rubric	Interval	Responsible for data
Summary of rating sheet	Team Design project presentation.	CET 211 Assessment Matrix 9	Project Assessment Rubric	2 years	Instructor
Summary of rating sheet	Team Design Project presentation.	CET 223 Assessment Matrix 10	Project Assessment Rubric	2 years	Instructor
Summary of rating sheet	Team Estimating Project presentation.	CET 201 Assessment Matrix 11	Project Assessment Rubric	2 years	Instructor
Summary of Employer Survey results	Employer Survey	Questionnaire	Satisfaction Rating	2 years	CET Program Coordinator

PROGRAM OUTCOME 3d: Graduates will develop the organizational skills to track documents, and verbal, electronic and drafted information to complete lab design projects.

Submit to constituents for review	Activity	SOURCE	Assessment rubric	Interval	Responsible for data
Summary of rating sheet	Team Design project	CET 211 Assessment Matrix 9	Project Assessment Rubric	2 years	Instructor
Summary of rating sheet	Team Estimating Project	CET 201 Assessment Matrix 9 and 10	Project Assessment Rubric	2 years	Instructor
Summary of Employer Survey results	Employer Survey	Questionnaire	Satisfaction Rating	2 years	CET Program Coordinator

➤ **OBJECTIVE 4:** *Produce graduates who are aware of ethical and social considerations in industry.*

PROGRAM OUTCOME 4a: Graduates will be informed on the limits to data collection as well as the engineering responsibility to provide reliable measurement and truthful reporting.					
Submit to constituents for review	Activity	SOURCE	Assessment rubric	Interval	Responsible for data
Summary of rating sheet.	Data Collection and Analysis	CET 222 Assessment Matrix 7 & 8	Laboratory Assessment Rubric	Yearly	Instructor
Summary of rating sheet.	Data Collection and Analysis	CET 240 Assessment Matrix	Laboratory Assessment Rubric	Yearly	Instructor
Summary of rating sheet.	Data Collection and Analysis	CET 225 Assessment Matrix	Laboratory Assessment Rubric	Yearly	Instructor
Summary of rating sheet.	Field Data Collection in notebook	CET 232 Assessment Matrix 7 & 8	Laboratory Assessment Rubric	Yearly	Instructor

PROGRAM OUTCOME 4b: Students will be informed of the ethical and social considerations and dilemmas that they may encounter in their professional career. Students will be encouraged to value the diversity of people and ideas.					
Submit to constituents for review	Activity	SOURCE	Assessment rubric	Interval	Responsible for data

