

# ASNUNTUCK COMMUNITY COLLEGE

## Technology Studies: Energy Management\* - Associate in Science (A.S.) Degree

Student Name: \_\_\_\_\_ Student ID#: \_\_\_\_\_

Offered <u>F</u> all, <u>S</u> pring, <u>S</u> ummer, or <u>W</u> inter	Semester/Year Plan to Take	Course #	Course Title	Credits	Semester/Year Completed	Grade	Fulfills Certificate
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### Major Requirements: 28 minimum credits

		+CAD*133	CAD Mechanical AutoCAD (pre-requisite: "C-" or better in MAT*095 or placement into MAT*137)^A	3			
		NRG*101	Introduction to Energy & Systems^A	3			✓
		+NRG*122	Commercial HVA Systems & Analysis (pre-requisite: NRG*123 and PHY*121)^A	3			✓
		+NRG*123	Energy Efficiency Methods (pre-requisite NRG*101)^A	3			✓
		+NRG*130	Applied Renewable Energy Systems (pre-requisite NRG*123 and PHY*121)^A	3			✓
		+NRG*132	Industrial Energy Systems (pre-requisite NRG*123)^A	3			✓
		NRG*133	Lighting Fundamentals & Applications^A	3			✓
		+NRG*241	Commercial Energy Use Analysis & Simulations (pre-requisite NRG*123 and NRG*122)^A	4			
		+NRG*242	Energy Accounting (pre-requisite NRG*123)^A	3			

### General Education Requirements: 36 minimum credits

F, Sp, Su		COM*173	Public Speaking	3			
F, Sp, Su		+ENG*101	Composition	3			
F, Sp, Su		+MAT*167	Principles of Statistics	3			
Sp		+CHE*111	Concepts of Chemistry	4			
F		OR +CHE*121	General Chemistry I				
Sp		+ENG*202	Technical Writing	3			
F, Sp, Su		+MAT*186	Precalculus	4			
See catalog			<b>Fine Arts Elective</b> (Choose one): ART*, COM*166, DGA*111, 128, GRA*, MUS*, THR*	3			
See catalog			<b>Social and Behavioral Sciences Electives</b> (Choose one): +HIS*, or POL*	3			
See catalog			<b>Social and Behavioral Sciences Electives</b> (Choose one): ECN*, or HIS*	3			
See catalog			<b>Social and Behavioral Sciences Electives</b> (Choose one): PSY*, or SOC*	3			
See catalog		+PHY*121	General Physics I (prerequisite: "C" or better in MAT*137 or 137S, or two years of high school algebra, or math assessment test)	4			✓

**Total Credits Required 64**

**^Becoming Connecticut State Community College:** STUDENTS: The Community Colleges are undergoing a merger with a plan to become Connecticut State Community College in fall 2023; please work closely with your advisor/program coordinator to select your courses accordingly. See page 53 of the 2021-2022 College Catalog for more detail about this exciting transition!

**^^Course needs to be taken at TxCC and then credits transferred to ACC upon completion. 61% of the Technology Studies: Energy Management AS degree program can be completed at ACC. PHY\*121 can be cross-listed between ACC and TxCC and the credits would be awarded by ACC. The major requirements can be taken at TxCC. ACC is required to award no less than 25% of the credits in a degree in order to grant the degree.**

+Prerequisite Required      \*\*Transfer students should consult transfer institutions for course recommendations      \*Common Course Numbering

Reviewed by: \_\_\_\_\_ Date: \_\_\_\_\_

*NOTE: All courses for degree credit must be numbered 100 or above. Students planning to transfer should refer to the requirements of the receiving transfer institution.*

### Program Information

**Program Outcomes:** Upon successful completion of all courses in the program, students will be able to:

1. identify and apply the design principles of engineering and technology when solving basic engineering problems
2. utilize the tools, materials, techniques, and technical processes of engineering and technology when solving technical problems
3. apply the basic concepts of science and mathematics to the study of electricity and electronics, materials, computer-aided design (CAD), manufacturing, and construction
4. utilize appropriate computer software when creating technical drawings and presentations
5. create two-dimensional technical drawings, solid models, and surface models, according to current engineering standards
6. identify energy conversion processes and their relation to engineering and technology
7. demonstrate technical competency in a functional area of technology. The specialization may include, but is not limited to: electricity, computer aided drafting and design, manufacturing, and construction.

**Transfer Opportunities:** All credits directly transfer to CCSU. Successful completion of the program allows students to enter their junior year at Central Connecticut State University. **Employment Information:** By 2025, national spending on utility led energy efficiency programs is projected to double from 2010 levels of about \$4 billion to approximately \$9.5 billion (Ernest Orlando Berkley National Laboratories). The U.S. Department of Labor projects a “bright outlook” for workers in energy efficiency. The rapid growth of commercial building energy efficiency projects in CT has created long-term demand for qualified energy analysts. Unlike traditional construction jobs, energy jobs are considered recession-resistant. Starting salaries are between \$40,000 and \$60,000 annually.

**Graduation Information:** A cumulative 2.0 GPA is required to graduate. All courses for degree credit must be numbered 100 or above. Students must complete and submit a Graduation Application to the Registrar's Office in order to graduate. Graduation Application deadlines: December graduation - December 1st, May graduation - March 31st, August graduation - August 1st.

### Subject Area Designations

ACC	Accounting	CST	Information Systems Technology (Computer-Technology)	MAT	Mathematics
ANT	Anthropology	DAN	Dance	MED	Medical Assisting
ART	Art	DGA	Digital Arts	MFG	Manufacturing
AST	Astronomy	ECE	Early Childhood Education	MUS	Music
BBG	Business (General)	ECN	Economics	OCE	Oceanography
BES	Business (Entrepreneurship)	ENG	English	PHL	Philosophy
BFN	Business (Finance)	EVS	Environmental Science	PHY	Physics
BIO	Biology	GEO	Geography	POL	Political Science
BMG	Business (Management)	GRA	Graphic Arts	PSY	Psychology
BMK	Business (Marketing)	HDEV	Human Development	QUA	Quality Assurance
CAD	Computer Aided Drafting	HIS	History	SGN	Sign Language
CHE	Chemistry	HLT	Health	SOC	Sociology
CJS	Criminal Justice	HSE	Human Services	SPA	Spanish
COM	Communications	HPE	Health and Physical Education	THR	Theatre
CSA	Information Systems Technology (Computer-Applications)	HUM	Humanities		
CSC	Information Systems Technology (Computer-Science)	MAS	Massage Therapy		

### Contact Information

**Please contact the Program Coordinator, Arben Zeqiraj, for more information at 860.253.3079 or [azeqiraj@asnuntuck.edu](mailto:azeqiraj@asnuntuck.edu).**

Notice of Non-discrimination: Asnuntuck Community College does not discriminate on the basis of race, color, religious creed, age, sex, national origin, marital status, ancestry, present or past history of mental disorder, learning disability or physical disability, sexual orientation, gender identity and expression or genetic information in its programs and activities. In addition, the College does not discriminate in employment on the basis of veteran status or criminal record. The following individuals have been designated to handle inquiries regarding the non-discrimination policies: Timothy St. James, Interim Dean of Students/Title IX Deputy, [tstjames@asnuntuck.edu](mailto:tstjames@asnuntuck.edu) (860) 253-3011 and Deborah Kosior, 504/ADA Coordinator, [AS-DisabilityServices@asnuntuck.edu](mailto:AS-DisabilityServices@asnuntuck.edu) (860) 253-3005, Asnuntuck Community College, 170 Elm Street, Enfield, CT 06082.