

Alexandria Technical and Community College				Thomas Edison State University				NAVY MOS	
AS Nuclear Engineering Technology				BS - Nuclear Energy Engineering Technology				Nuclear Power School	
TESU		ATCC		TESU				NAVY Power School	
Degree Requirements	Credits Needed	ATCC Course	Course Title	Credits	TESU Course/Option	Course Title	Credits		
I. General Education Requirements		46							
A. Intellectual and Practical Skills									
i. Written Communications	6	ENGL1410 ENGL 1420	English Composition I English Composition II	3 3					
ii. Oral Communications	3				COM-209	Public Speaking	3		
iii. Quantitative Literacy	3	MATH1447	Introduction to Statistics	4					
iv. Information Literacy / SOS 110: Critical Information Literacy	3				SOS-110	Critical Information Literacy	3		
B. Civic and Global Learning									
i. Diversity	3				TBD	TESU Diversity Course List	3		
ii. Ethics	3	PHIL1460	Naval Ethics and Leadership	3					
iii. Civic Engagement	3	POLS1635	Civilian/Military Relations, Organ & American Government	3					
C. Knowledge of Human Cultures									
Social Sciences	3	GEOG1500	Intro to Geopolitical Environ	3					
History	3	HIST1665	Modern Naval History	3					
Humanities	3	ENGL1495	Environmental Literature	3					
Two Courses from the categories above	6	COMM1427	Intercultural Communication	3					
					TBD	TESU Social Science/History/Humanities Course List	3		
D. Scientific Knowledge									
	7	CHEM1500	Chemistry I with Lab	4				Yes	
		MFGT2552	Programmable Logic Controllers	4					
II. Major: Nuclear Energy Engineering Technology		67							
Calculus I	4	MATH-1426	Calculus I	4					
Calculus II	4	MATH-2232	Calculus II	4					
Physics I with Lab	4	PHYS1081	Engineering Physics I with Lab	4				Yes	
Physics II with Lab	4	PHYS1082	Engineering Physics II with Lab	4					
NUC-303 Nuclear Physics for Technology	3				NUC-303	Nuclear Physics for Technology	3	Yes	
EGM-321 Thermodynamics	3				EGM-321	Thermodynamics	3	Yes	
EGM-323 Heat Transfer	3				EGM-323	Heat Transfer	3	ACE MM (MO) Only	
EGM-331 Fluid Mechanics	3				EGM-331	Fluid Mechanics	3		
Reactors/Plant Systems	6				NUC-365 NUC-331	Reactor Fundamentals Primary Reactor Systems	3 3	Yes	
NUC-351 Nuclear Instrumentation and Control	3				NUC-351	Nuclear Instrumentation and Control	3	Yes	
Radiation Effects	6				TBD TBD	TESU Radiation Effects Course List TESU Radiation Effects Course List	3 3		
Electrical Theory	3				ELE-211	DC Circuits	3	Yes	
NUC-402 Nuclear Materials	3				NUC-402	Nuclear Materials	3		
NUC-238 Radiation Analysis Laboratory	1				NUC-238	Radiation Analysis Laboratory	1		
AOS Electives	10	TBD	Nuclear Technical Elective	4				Yes	
					TBD	TESU Nuclear Electives	3		
					TBD	TESU Nuclear Electives	3		
APS-490 Engineering Technology Assessment/Career Planning	3				APS-490	Engineering Technology Assessment/Career Planning	3		
NUC-495 Nuclear Energy Engineering Technology Capstone	4				NUC-495	Nuclear Energy Engineering Technology Capstone	4		
III. Electives		7							
		MATH1425	Pre-Calculus	4					
		HIST2410	Naval Force Design	3					
TOTAL	120	ATCC TOTAL		63	TESU TOTAL		59		
							GRAND TOTAL	122	41-44 credits remain

Options for Civic Engagement TESU Course - Credits
FDR-440: Fundraising for Nonprofits - 3
GLB-301: Global Issues and Society - 3
POS-110: American Government - 3
POS-282: Introduction to Comparative Politics - 3
POS-310: Constitutional Issues - 3
SOC-376: Women and Social Action - 3
SOS-370: Challenges in U.S. and Global Public Health - 3
SOS-425: Deliberative Democracy and Social Action - 3

Options for Diversity TESU Course - Credits
ANT-101: Introduction to Anthropology - 3
COM-335: Intercultural Communication - 3
GLB-301: Global Issues in Society - 3
GOG-230: World Geography - 3
HEA-305: Women's Health - 3
HEA-306: Men's Health - 3
HIS-126: World History from 1600 to Present - 3
HIS-210: American Civil Rights Movement - 3
HIS-261: Introduction to Chinese History and Culture - 3
HIS-301: African History and Culture - 3
HIS-306: African American History - 3
LDR-422: Leadership in a Global Environment - 3
MAN-372: International Management - 3
POS-282: Introduction to Comparative Politics - 3
POS-315: International Relations I - 3
POS-420: Conflict in International Relations - 3
PSY-270: Psychology of Women - 3

Options for Nuclear Electives TESU Course - Credits
APS-400 Occupational Safety and Health - 3
APS-402 Applied Quality Management - 3
NUC-342 Radiological, Reactor and Environmental Safety - 3
NUC-380 Nuclear Rules and Regulations - 3
NUC-412 Radiation Biophysics - 3
NUC-413 Radiation Interactions - 3
RPT-260 Radiation Detection and Instrumentation - 3
RPT-270 Introduction to Nuclear Engineering Technology and Radiation Health Physics - 3
RPT-271 Radiation Biology - 3
RPT-272 Radiation Ecology - 3
RPT-275 Introduction to Radiation Generating Devices - 3
RPT-280 Radioactive Shipping, Packaging, and Transporting - 3
RPT-302 Radiation Shielding and External Dosimetry - 3

Options for Radiation Effects TESU Course - Credits
NUC-342 Radiological, Reactor and Environmental Safety - 3
NUC-412 Radiation Biophysics - 3
NUC-413 Radiation Interactions - 3
RPT-270 Introduction to Nuclear Engineering Technology and Radiation Health Physics - 3