

**State Technical College of Missouri AAS in Nuclear Technology Reactor Operations Option to TESU BSAST in Nuclear Energy Engineering Technology**

<b>State Technical College of Missouri AAS in Nuclear Technology Reactor Operations Option</b>	<b>Credit</b>	<b>Thomas Edison State University BSAST – Nuclear Energy Engineering Technology (NEET)</b>	<b>Credits</b>
<i>GENERAL EDUCATION</i>			
		<i>GENERAL EDUCATION</i>	
		<b>Intellectual and Practical Skills (15 Credits)</b>	<b>15</b>
(COM 101) English Composition	3	Written Communications (6 credits)	
Need to complete 3 credits		English Composition (3 credits)	
		English Composition II (3 credits)	
(COM 111) Oral Communications	3	Oral Communications (3 credits)	
(MAT 123) Calculus I Need to complete Calculus II	5	Quantitative Literacy (3 credits)	
(COM 211) Technical Writing	3	Information Literacy (3 credits)	
Need to complete 9 credits		<b>Civic and Global Learning</b>	<b>9</b>
		Ethics Course (3 credits)	
		Diversity Course (3 credits)	
		Civic Engagement (3 credits)	
Need to complete 9 credits		<b>Knowledge of Human Cultures</b>	<b>9</b>
(PSC 101) American Government Need to complete 5 credits	3	<b>Understanding of the Physical and Natural World</b>	<b>8</b>
(MNT 107) Basic Nuclear Math and Theory	4	<b>Mathematics</b>	<b>3</b>
(PHY 101/102) College Physics with Lab Need to complete Physics II with Lab 4 credits (PHY 121) General Chemistry I (COM 125) Job Search Strategies Need to complete 2 credits	4 5 1	<b>General Education Electives</b>	<b>16</b>

<b>Subtotal of General Education Transfers</b>	<b>31</b>	<b>Subtotal of General Education</b>	<b>60</b>
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<b>State Technical College of Missouri AAS in Nuclear Technology Reactor Operations Option</b>	<b>Credits</b>	<b>Thomas Edison State University – Nuclear Energy Engineering Technology (NEET)</b>	<b>Credits 51</b>
		<b>Area of Study:</b> (At least 12 credits of Area of Study must be 300-400 level courses)	
Need to complete 3 credits		Nuclear Physics for Technology (NUC-303) (3 credits)	
(MNT 270) Thermodynamics, Fluid Flow & Advances Reactor Theory	5	Thermodynamics	
Need to complete 3 credits		Heat Transfer) (3 credits)	
(MNT 110) Mechanical & Fluid Power Transmission	1	Fluid Mechanics) (3 credits)	
(MNT 197) Basic Reactor Safety, Theory, and Operations	4	<b>Reactors and Plant Systems (9 credits)</b> <ul style="list-style-type: none"> <li>• Reactor Fundamentals (NUC-365) ) (3 credits)</li> <li>• Primary Reactor Systems (NUC-331) ) (3 credits)</li> <li>• Nuclear Instrumentation and Control (NUC-351) ) (3 credits)</li> </ul>	
(MNT 274) Reactor Plant Systems	3		
(MNT 278) Reactor Plant Operations	4		
Need to complete 6 credits		<b>Radiation Effects (6 credits)</b> <ul style="list-style-type: none"> <li>• Radiation Biophysics (NUC-412) ) (3 credits)</li> <li>• Radiation Interactions (NUC-413) ) (3 credits)OR</li> <li>• Radiological, Reactor &amp; Environmental Safety (NUC-342) ) (3 credits)</li> </ul>	
(MAR 101) Introduction to Electricity	4	Electrical Theory (ELE-211 or ELE-212) (3 credits)	
Need to complete 3 credits		Nuclear Materials (NUC-402) (3 credits)	
Need to complete 1 credit		Radiation Analysis Laboratory (1 credit)	
(MNT 189) Reactor Plant Components Need to complete 2 credits	4	<b>Nuclear Electives (10 credits)</b> <ul style="list-style-type: none"> <li>• Military/INPO Discipline Training including Laboratory/Practicum OR</li> <li>• Occupational Health and Safety (APS-400) (3 credits)</li> <li>• Applied Quality Management (APS-300) (3 credits)</li> <li>• Regulatory Policy and Procedures (EUT-401)</li> <li>• Applied Economic Analysis (EUT-402) (3 credits)</li> </ul> Required credits from academically reviewed training/experiences OR above listed courses	
Need to complete 3 credits		Nuclear Technology Assessment/Career Planning (NUC-490) (3 credits)	3
Need to complete 4 credits		Nuclear Engineering Technology Capstone (NUC-495) (4 credits)	4

(CPP 101) Introduction to Microcomputer Usage	3	<b>Free Electives</b>	<b>15</b>
(MNT 100) Human Performance Fundamentals	2		
(MNT 211) Piping and Instrumentation Drawings	2		
(MNT 290) Internship	4		
Need to complete 5 credits			
<b>Total Transferred</b>	<b>67</b>	<b>Total Credits for Degree</b>	<b>126</b>
		<b>*Degree Requirements</b> ➤ <b>Technical Writing</b> 3 credits ➤ <b>Statistics</b> 3 credits ➤ <b>Calculus I</b> 3 credits ➤ <b>Calculus II</b> 3 credits ➤ <b>Physics I with Lab</b> 4 credits ➤ <b>Physics II with Lab</b> 4 credits ➤ <b>Chemistry I with Lab</b> 4 credits ➤ <b>Computer Programming Requirement or Programmable Logic Controllers (CTR-212)</b> 3 credits	