

**Program Coordinator:** Gordon Jones  
**Contact Information:** (606)759-7141 ext. 66151

**Email:** GordonL.Jones@kctcs.edu  
**Office Contact:** MYC Technical Bldg., T-106

**Student Name** \_\_\_\_\_

**Student ID #** \_\_\_\_\_

Course Prefix Number	Course Title	Cr. Hrs.	Associate in Applied Science Degree		Certificate	
			Required	Term	Required	Term
			<b>Energy Systems 1505037019 Power Plant Operation Option 150503701</b>		<b>Power Plant Operations 150503019</b>	
MAT 116	Technical Mathematics	3	Yes		Yes	
ENG 101	Writing I	3	Yes			
PHY 151	Introductory Physics I or higher	3	Yes		Yes	
	Heritage/Humanities	3	Yes			
	Social Interaction (ECO 101 Preferred)	3	Yes			
	Communication	3	Yes			
	Computer/Digital Literacy	0-3	Yes			
<b>Subtotal General Education</b>		<b>18-21</b>			6	
ESP 101	Introduction to Energy Systems	3	Yes			
ESP 211	Power Plant Operations I: Introduction to Power Plant Operations	3	Yes		Yes	
ISX 101	Introduction to Industrial Safety	3	Yes		Yes	
ELT 102	Blue Print Reading	2	Yes		Yes	
ESP 220	Power Plant Thermodynamics <b>OR</b>	3	Either		Either	
ELT 208	Thermodynamic Applications	(3)	Or		Or	
ENV 110	Introduction to Environmental Technology	4	Yes			
ESP 110	Petroleum Based Fuels	3	Yes		Yes	
ESP 280	Capstone in Energy Systems <b>OR</b>	3	Either			
ISM 210	Fundamentals of Process Control	(3)	Or			
<b>Subtotal Technical Core</b>		<b>24</b>			<b>14</b>	
ESP 212	Power Plant Operations II: Boilers/Fuel/Air/Combustion/Emissions	3	Yes		Yes	
ESP 213	Power Plant Operations III: Water/Steam/Turbines/Generators	3	Yes		Yes	
ESP 214	Power Plant Operations IV: Auxiliaries	3	Yes			
ESP 120	Power Plant Chemistry	3	Yes			
ESP 130	Electrical Concepts	3	Yes		Yes	
OR ELT 110	Circuits I	(5)				
ESP 132	Electrical Machinery and Controls	3	Yes			
OR ELT 244	Electrical Machinery & Controls	(4)				
COE 199	Cooperative Education	3	Yes		Yes	
<b>Subtotal Power Plant Option</b>		<b>21</b>			<b>12</b>	
<b>TOTAL CREDIT HOURS</b>		<b>63-66</b>			<b>32</b>	

**Note:** When switching from a certificate or diploma to a degree, placement scores must be re-evaluated.

**Advising Notes:**

- Math completion is required prior to taking Physics
- Physics must be completed before taking Thermodynamics Applications
- Power Plant I meet on campus the first night of classes thereafter it meets at East Kentucky Power. It is very important to attend the first class to receive this information.

**Student Note & Program Information:**

You will advise the first semester of classes with the Master Advising Center Advisors to register for classes, receive New Student Information, and attend Orientation. For your second semester you will schedule your advising appointment with the Program Coordinator.

**Placement for AAS Degree**

**Placement for Certificate**

	Reading	Writing	Mathematics		Reading	Writing	Mathematics
ACT	20 or higher	18 or higher	19 or higher	ACT	20	18	19-21
COMPASS	85	74	31 or higher	COMPASS	80	64	42 (pre-algebra domain)

5-Semester Plan

<b>1<sup>ST</sup> FALL SEMESTER</b>			
<b>Subject/Catalog</b>	<b>Course Title</b>	<b>Credit hours</b>	<b>Credit Earned</b>
ESP 211	PP1-Introduction to Power Plant Operations	3	
ISX 101	Introduction to Industrial Safety (Online)	3	
ESP 130	Electrical Concepts	3	
<b>OR</b> ELT 110	Circuits I	(3)	
MAT 116	Technical Math	3	
ESP 120	Power Plant Chemistry (Online)	3	
<b>Total Credits Earned this Semester</b>		<b>15</b>	
<b>1<sup>ST</sup> SPRING SEMESTER</b>			
ESP 212	PP2-Boiler/Fuel/Air/Combustion/Emissions	3	
ESP 101	Introduction to Energy Systems	3	
ESP 132	Electrical Machinery & Controls	3	
<b>OR</b> ELT 244	Electrical Machinery & Controls	(4)	
PHY 171	Introduction to Physics	3	
ELT 102	Blue Print Reading	2	
<b>OR</b> IET 104	Blueprint Reading/Schematics	(2)	
<b>Total Credits Earned this Semester</b>		<b>14-15</b>	
<b>SUMMER SEMESTER</b>			
ESP 110	Petroleum Based Fuels (Online)	3	
ENG 101	Writing I	3	
ECO 101 Preferred	Social Interaction	3	
<b>Total Credits Earned this Semester</b>		<b>9</b>	
<b>2<sup>ND</sup> FALL SEMESTER</b>			
ESP 213	PP3-Water/Steam/Turbines/Generators and Simulator Training	3	
ESP 220	Power Plant Thermodynamics Applications	3	
<b>OR</b> ELT 208	Thermodynamic Applications	(3)	
ENV 110	Introduction to Environmental Technology	4	
	Heritage/Humanities	3	
<b>Total Credits Earned this Semester</b>		<b>13</b>	
<b>2<sup>ND</sup> SPRING SEMESTER</b>			
ESP 214	PP4-Auxiliary Systems and Simulator Training	3	
ESP 280	Capstone In Energy Systems	3	
<b>OR</b> ISM-210	Fundamentals of Process Control	(3)	
	Communication	3	
	Computer/Digital Literacy	0-3	
COE 199	ESP Cooperative Education	3	
<b>Total Credits Earned this Semester</b>		<b>12-15</b>	
<b>Total of All Credits Earned</b>		<b>63-67</b>	