

Advanced Industrial Integrated Technology (AIIT)

AAS – Multi-Skilled Technician Option (68 credits)

Madisonville
Advising Plan

2009
-2010

Name _____ Empl ID# _____

General Education Requirements

Course	Hrs	Grade	Semester
ENG 101 Writing I	3		
MT 125 Technical Algebra & Trigonometry <u>or</u> MT 150 College Algebra	3		
PH 171 Applied Physics*	4		
Social Interaction	3		
Heritage <u>or</u> Humanities <u>or</u> Foreign Language	3		

Subtotal Credits: 16 hours

*Prerequisites: MT 110, MT 115, MT 120 or MT 122 or two years of high school algebra or equivalent or consent of instructor.

Multi-Skilled Industrial Technician Option Requirements

Course	Hrs	Grade	Semester
AIT 200 Integrated Process Control (2 modules)	4		
**ACR 100 Refrigeration Fundamentals and **ACR 101 Refrigeration Fundamentals Lab	3 2		
IMT 100 Welding for Maintenance and IMT 101 Welding for Maintenance Lab (Course and lab offered in summer only!)	3 2		
MTT 112 Fundamentals of Machining B	4		
EET 276 Programmable Logic Controls and EET 277 Programmable Log Controls Lab	2 2		

Subtotal Credits: 22 hours

**Students may enroll in ACR 100 and ACR 101 along with their developmental classes as long as they place at or above RDG 030

AIIT Technical Core Requirements

Must complete all courses with a grade of "C" or higher

Course	Hrs	Grade	Semester
AIT 100 Power Generation & Utilization (3 modules)	4		
AIT 110 Power Distribution Systems (2 modules)	3		
AIT 120 Equipment Installation (3 modules)	3		
AIT 130 Measurement and Instrumentation (3 modules)	4		
AIT 140 Industrial Controls I (3 modules)	4		
AIT 150 Industrial Controls II (3 modules)	4		
AIT 160 Workplace Safety	1		
AIT 210 Advanced Equipment Maintenance (3 modules)	4		
CIS 100 Introduction to Computers	3		

Subtotal Credits: 30 hours

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Lecture component of all AIT courses are delivered online; students are required to attend AIT course lab components on the MCC North campus, Brown Badgett Complex.

SAMPLE SCHEDULING PLAN	
<p><u>First Fall Semester</u> AIT 100 (4 credits) AIT 110 (3 credits) AIT 160 (1 credit) CIS 100 MT 125 or MT 150 <i>Total: 14 credits</i></p>	<p><u>Second Fall Semester</u> AIT 150 (4 credits) MTT 112 (4 credits) ACR 100 (3 credits) and ACR 101 (2 credits) AIT 130 (4 credits) <i>Total: 17 credits</i></p>
<p><u>First Spring Semester</u> AIT 120 (3 credits) AIT 140 (4 credits) ENG 101 PH 171 (4 credits) <i>Total: 14 credits</i></p>	<p><u>Second Spring Semester</u> AIT 200 (4 credits) AIT 210 (4 credits) EET 276 (2 credits) and EET 277 (2 credits) Heritage or Humanities or Foreign Language Social Interaction <i>Total: 18 credits</i></p>
<p><u>First Summer Semester</u> IMT 100 (3 credits) and IMT 101 (4 credits) Courses offered only in summer! <i>Total: 5 credits</i></p>	
<p><u>Program Coordinator’s Notes:</u></p> <p>Sample schedule reflects only one example of AIIT scheduling. AIIT courses are offered both semesters.</p> <p>ACR 100 and ACR 101: Students <u>may</u> enroll in ACR 100 and ACR 101 <u>concurrently</u> with a developmental writing course (ENC 90, ENC 91), and/or a developmental math course (MT 55, MT 65) as long as reading placement is at RDG 030 or above.</p> <p>Students placing in GAP writing and/or GAP math course(s) are not eligible to enroll in ACR 100 and ACR 101.</p> <p>AIT courses: Students <u>cannot</u> enroll in AIT courses if reading placement is at developmental level (RDG 020, RDG 030) or below (GAP placement).</p> <p>Students <u>cannot</u> enroll in AIT courses if math placement is at MT 55 (Pre-Algebra) level or below (GAP placement).</p> <p>Students placing into MT 65 (Basic Algebra) <u>may</u> enroll in AIT 100 and AIT 110 if they <u>concurrently enroll</u> in MT 65 the same semester.</p> <p>Mandatory orientation for AIIT students: All AIT students <u>must</u> attend a required orientation held at the beginning of each semester. AIIT students will be informed of meeting date and time by letter.</p> <p>Tuition charges for semester will include fees for E-learning components required for AIIT program online courses.</p>	

AIIT Curriculum – Modules per Course

➤ AIT 100 Power Generation and Utilization	4 credits
○ AIT 1001 Basic Electrical Knowledge	2 credits
○ AIT 1002 Power Development	1 credit
○ AIT 1003 Hydraulic/Pneumatic Fundamentals	1 credit
➤ AIT 110 Power Distribution Systems	3 credits
○ AIT 1101 Electrical Power Distribution	1.5 credit
○ AIT 1102 Fluid Power Distribution	1.5 credit
➤ AIT 120 Equipment Installation	3 credits
○ AIT 1201 Electrical Installation	1 credit
○ AIT 1202 Piping, Pneumatic, & Installation	1 credit
○ AIT 1203 Mechanical Installation	1 credit
➤ AIT 130 Measurement and Instrumentation	4 credits
○ AIT 1301 General Measurement and Introduction to Instrumentation	1 credit
○ AIT 1302 Quality Control and SPC	2 credits
○ AIT 1303 Quality Systems	1 credit
➤ AIT 140 Industrial Controls I	4 credits
○ AIT 1401 Basic Electrical Controls	2 credits
○ AIT 1402 Basic Pneumatic Controls	1 credit
○ AIT 1403 Basic Hydraulic Controls	1 credit
➤ AIT 150 Industrial Controls II	4 credits
○ AIT 1501 Intermediate Electrical Controls	2 credits
○ AIT 1502 Intermediate Pneumatic Controls	1 credit
○ AIT 1503 Intermediate Hydraulic Controls	1 credit
➤ AIT 160 Workplace Safety	1 credit
➤ AIT 200 Integrated Process Control	4 credits
○ AIT 2001 Elements of Integrated Process Control Sub-systems	2 credits
○ AIT 2002 Integrated Dynamics of Process Control Systems	2 credits
➤ AIT 210 Advanced Equipment Maintenance	4 credits
○ AIT 2101 Predictive/Preventive Maintenance and Lubrication	1.1 credits
○ AIT 2102 Power Transmission Systems	1.3 credits
○ AIT 2103 Advanced Mechanical	1.6 credits
➤ AIT 290 Selected Topics in AIIT	0.1-5 credits
➤ MTT 112 Fundamentals of Machine Tools B	4 credits
➤ EET 276 Programmable Logic Controllers	2 credits
➤ EET 277 Programmable Logic Controllers Lab	2 credits
➤ IMT 100 Welding for Maintenance	3 credits
➤ IMT 101 Welding for Maintenance Lab	2 credits
➤ ACR 100 Refrigeration Fundamentals	3 credits
➤ ACR 101 Refrigeration Fundamentals Lab	2 credits