PROGRAM PROPOSAL FORM

☐ **Preliminary Approval** – Check here when using this form for preliminary approval of a program proposal, and respond to the items in general terms.

☒ **Final Approval** – Check here when completing this form after the Vice President of Instruction has given preliminary approval to a program proposal. For final approval, complete information must be provided for each item.

Program Name:	Industrial Training
Division and Department:	UA Programs and Services
Type of Award:	☐ AA ☒ AS ☐ AAS ☐ Cert. ☐ Adv. Cert. ☐ Post-Assoc. Cert. ☐ Cert. of Comp.
Effective Term/Year:	Fall 2005
Initiator:	Dan Welch and Mike Griffith

Program Code: ASINDT   CIP Code: 44.0103

Program Features Program's purpose and its goals. Criteria for entry into the program, along with projected enrollment figures. Connection to other WCC programs, as well as accrediting agencies or professional organizations. Special features of the program.	This program gives apprenices and journeypersons of the United Association of Plumbers and Pipefitters the opportunity to apply their work as certified apprentice instructors toward an associate's degree in Industrial Training. In addition to the fifteen credits awarded for completion of five summer instructor traning sessions, students will complete a minimum of 19 credits in general education courses and receive 32 non-traditional credits for experience in an area of specialization: Plumbing, Pipefitting, HVAC, or Sprinklerfitting. Only open to United Association of Plumbers and Pipefitters Apprentices/Journeyworkers. This program currenlty maintains an enrollment of 1,600-2,000 students per year.
Need Need for the program with evidence to support the stated need.	An Associate in Science option is needed for students transferring to four year schools with additional science and math entry requirements.

| **Program Outcomes/Assessment**

State the knowledge to be gained, skills to be learned, and attitudes to be developed by students in the program.

Include assessment methods that will be used to determine the effectiveness of the program. | **Outcomes**
1. Apply UA recommended instructional techniques in designing learning experiences for UA members.

2. Use UA recommended instructional materials effectively in designing learning experiences.

3. Design and implement learning experiences that teach the principles of applied knowledge subjects such as science, mathmatics, drawing, and electricity.

4. Acquire knowledge of the technical aspects, latest developments, and skills of | **Assessment method**
1. Students submit lesson plans, tests, presentations, and other instructional materials for review, and for possible inclusion in the UA Online Curriculum Database. Materials are reviewed by committee using a UA approved checklist. |

	the crafts to incorporate into learning experiences for UA members.	

Curriculum Courses. List the courses in the program as they should appear in the catalog. List minimum credits required. Include any notes that should appear below the course list.	UAT 111, UAT 121, UAT 131, UAT 141, UAT 151, UAT 161, UAT 171, UAT 201, UAT 202, UAT 203, UAT 204, UAT 205 See attached sheet for additional description of courses. 66-71 Credits Required

Budget
 	
Specify program costs in the following areas, per academic year:
    Faculty
    Training/travel
    Materials/resources
    Facilities/equipment
    Other
	Start-up costs
	None. Program is ongoing.
	
	Ongoing costs
	Cost of instruction is paid for by the UA Training Department.

Program Description for Catalog and Web site	This program gives apprentices and journeyworkers of the United Association of Plumbers and Pipefitters the opportunity to apply their work as certified apprentice instructors toward an associate's degree in Industrial Training. In addition to the fifteen credits awarded for completion of the five summer instructor training sessions, students will complete a minimum of 19 credits in general education courses and receive 32 non-traditional credits for experience in an area of specialization such as plumbing, pipefitting, HVAC, or sprinklerfitting. Those enrolling in this program can elect to receive an associate in applied science degree instead of an associate in science degree. An advisor will direct students who are interested in this option.
Program Information	**Accreditation/Licensure -** **Advisors -** Mike Griffith, Dan Welch **Advisory Committee -** Mike Arndt, Steve Allen, Cathy Merkel, Dan Welch, Mike Griffith **Admission requirements -** Open only to United Association of Plumbers ane Pipefitters apprentices/Journyeworkers **Articulation agreements -** Ferris State University and National Labor College **Continuing eligibility requirements -**

Assessment plan:

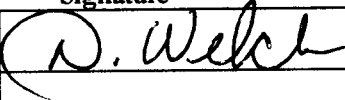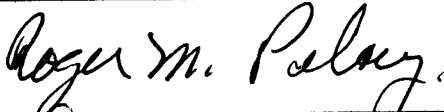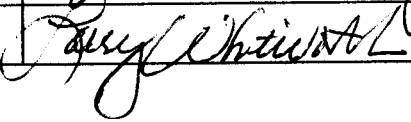| Learning outcomes to be assessed	Assessment tool	When assessment will take place	Course section(s)/other population	Number students to be assessed
1-4	UA Online Curriculum Database	Annually in November	Limited to certificate graduates	Random 50 students

Scoring and analysis plan:

1. Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally developed rubric, external evaluation, other). Describe the scoring range to be used, or include a copy of the rubric.

   The UA Online Curriculum Database contains tests, lesson plans, worksheets, diagrams, Power Point presentations and other teaching materials. The database is used to share materials between locals who teach the same curriculum. Each year the uploaded materials will be randomly reviewed for quality and content. The content review may indicate subject areas in the program that need updated training. The quality review of uploaded documents will confirm the desired level of overall work products.

2. Indicate the standard of success to be used for this assessment (e.g. 75% of students must meet all learning outcomes).

   As instructors submit materials for inclusion to the online database, they are reviewed by a committee for content and appearance. The review standards include technical accuracy, appropriateness for the subject area, page layout, and completeness. Documents are either approved for inclusion, sent back for revisions, or rejected.

3. Indicate who will score and analyze the data.

   UA and WCC members of the advisory committee and appoint d subj ct matt r xp rts in each of the trade areas will review the database.

4. Explain how and when the assessment results will be shared with the department and other involved faculty.

   This annual review will be shared with the advisory committee each Novemeber as input to the planning for the following year's Instructor Training rogram.

5. Describe any additional assistance the department will require to complete this assessment.

   None

Reviewer	Print Name	Signature	Date
Department Chair/Area Director	Daniel Welch	D. Welch	3/23/05
Dean			
Vice President of Instruction ☐ Approved for Development ☐ Final Approval		Roger M. Palay.	4/4/05
President			4/4/05
Board Approval			

United Association

Industrial Training (ASINDT)
Associate in Science Degree

Program Effective Term: Fall 2005

This program gives indentured apprentices and journeymen of the United Association of Plumbers and Pipefitters the opportunity to apply their work as certified apprentice instructors toward an associate in science degree in Industrial Training. Students will complete the general education courses, five summer apprentice training sessions, and receive non-traditional credits for experience in an area of specialization such as plumbing, pipefitting, HVAC, or sprinkler fitting.

Articulation:
Ferris State University and National Labor College

Program Admission Requirements:
Open only to United Association of Plumbers Apprentices/Journeymen

Continuing Eligibility Requirements:
Students must demonstrate basic computer literacy skills by successfully passing the Computer and Information Literacy Test. The test may be taken at any point during the program, but must be completed before graduating.

General Education Requirements   (27 credits)

Writing	ENG 107, ENG 111, ENG 226	6-7
Speech	Elective(s)	3
Math	Math 169 or higher	3-4
Nat. Sci.	Must contain a lab	3-4
Soc. Sci.	Elective(s)	6
Arts/Human.	Elective(s)	6

Major/Area Requirements   (15 credits)

Students must complete 15 credits from the following: UAT 111, UAT 121, UAT 131, UAT 141, UAT 151, UAT 161, UAT 171, UAT 201, UAT 202, UAT 203, UAT 204, UAT 205	15

**Minimum Concentration/Option Credits
Required for the Program:**   26

Complete a specialization in plumbing, pipefitting, HVAC, or sprinkler fitting. Students should apply for non-traditional credit evaluation of their apprenticeship experiences to meet the specialization requirement.

Minimum Credits Required for the Program   68

Industrial Training Options

HVAC Specialty (HVTC) (26 Credits)

UAE 140	Introduction to HVACR Service	3
UAE 142	Soldering and Brazing	3
UAE 144	Refrigeration	2
UAE 146	Air Conditioning	2
UAE 148	Electrical Controls	2
UAE 150	DC Electronics	2
UAE 152	Advanced Electrical Controls and Pneumatic Controls	3
UAE 154	Advanced Air Conditioning and Refrigeration	3
UAE 156	Air and Water Balancing and Motor Alignment	3
UAE 158	Advanced HVACR Practices	3

Pipefitter Specialty (PIPE) (26 Credits)

UAF 102	Introduction to Arc Welding, Soldering, and Brazing	3
UAF 120	Introduction to Pipefitter Practices	3
UAF 122	Drawing Interpretation and Plan Reading	2
UAF 124	Oxy Fuel Cutting and Shielded Arc Welding	2
UAF 126	Hydronic Heating and Steam Systems	2
UAF 128	Refrigeration and Electrical Controls	2
UAF 130	Advanced SMAW Welding	3
UAF 132	Advanced Pipefitter Topics	3
UAF 134	Controls and Instrumentation	3
UAF 136	GTAW Welding	3

Plumber Specialty (PLUM) (26 Credits)

UAP 100	Introduction to Plumbing Practices	3
UAP 102	Introduction to Arc Welding, Soldering, and Brazing	3
UAP 104	Drawing Interpretation and Plan Reading	2
UAP 106	Oxy Fuel Cutting and Shielded Arc Welding	2
UAP 108	Water Supply and Drainage	2
UAP 110	Customer Service Techniques	2
UAP 112	Plumbing Fixtures and Appliances	3
UAP 114	Plumbing Codes and Regulations	3
UAP 116	Medical Gas and Backflow Prevention Techniques	3
UAP 118	Advanced Plumbing Practices	3

Sprinkler Fitter Specialty (SPRF) (26 Credits)

UAR 160	Introduction to Sprinkler Fitter Practices	3
UAR 162	Basic Drawing and Introduction to Automatic Sprinklers	3
UAR 164	Reading Automatic Sprinkler Piping Drawings	2
UAR 166	Installation of Sprinkler Systems	2
UAR 168	Architectural Working Drawings and Blueprint Reading for Sprinkler Fitters	2
UAR 170	Sprinkler Water Supply and The Automatic Sprinkler	2
UAR 172	Types of Fire Protection Systems and Alarms	3
UAR 174	Special Application Sprinkler Systems and Hydraulics	3
UAR 176	Human Relations	3
UAR 178	Technical Writing	3