# **Summary of Program**

The Associates of Applied Science (AAS) degree in Process Technology is designed to provide education and training that will enable individuals to obtain employment in the industries that use and control mechanical, physical or chemical processes to produce a product.

In Alaska this includes the process industries of oil and gas production, chemical manufacturing, petroleum refining, power generation and utilities, water and wastewater treatment, timber, seafood and other food processing. The Process Technology program incorporates both technical and academic courses offered through University of Alaska campuses in Anchorage, Kenai and Fairbanks.

### You may learn more about the Process Technology program by calling:

**Dennis Steffy, Director ..... (907) 262-2788** Mining and Petroleum Training Service, UAA 155 Smith Way, Suite 101 • Soldotna, AK 99669

UAA is an EO/AA employer and educational institution.

### Process Technology Industries

Oil and Gas Production Chemical Manufacturing Seafood Processing Timber Petroleum Refining Food Processing Power Generation and Utilities Water and Wastewater Treatment

### **Admission Requirements**

ASSET placement for MATH at the A101 entry level or above

### ASSET placement for READING at the PRPE A107 level or above

Students placing below the math and reading levels on ASSET must see a faculty advisor in the Process Technology program prior to registering for Process Technology

## lt's as easy as 1-2-3

- 1. Apply for admission to the Process Technology program.
- 2. Make an appointment with the advising Process Technology faculty.
- 3. Meet regularly with the faculty advisor to stay on track.

UAA Enrollment Services KPC Enrollment Services	· · ·
UAA Financial Aid KPC Financial Aid	· · ·

### www.uaa.alaska.edu



# Process Technology

MAPTS anticipates there may be Process Technology enrollment openings for career interest and educational enhancement for industry members!

Mining and Petroleum Training Service Community and Technical College University of Alaska Anchorage



# Process Technology • 2004 Course Offerings

# Anchorage

MINING AND PETROLEUM TRAINING SERVICE

### UAA PT Program Coordinator: TBA • (907) 786-6415 • University Center, Rm 118 • 3901 Old Seward Hwy

76716	PRT	A101	IM2	Introduction to Process Technology	3 CR	Edmonston, D	Tuesday	5:30-8:30 PM	MAPTS UC
76718	PRT	A110	IM2	Introduction to Safety/Health	3 CR	Engle, Wayne	Wednesday	5:30-8:30 PM	MAPTS UC
76719	PRT	A140	IM2	Instrumentation I	3 CR	TBA	Tuesday	5:30-8:30 PM	MAPTS UC
76721	PRT	A144	IM2	Instrumentation II	3 CR	TBA	Wednesday	5:30-8:30 PM	MAPTS UC
76723	PRT	A230	IM2	Process Technology II: Systems	4 CR	TBA	Thursday	5:30-8:30 PM	MAPTS UC
	PRT	A230L	IM2	Process Technology II: Systems Lab		TBA	TBA	5:30-8:30 PM	MAPTS UC
76725	PRT	A255	IM5	Quality Concepts for the Process Industry	1 CR	Karnowski	Saturday	8:00-11:00 AM	MAPTS UC

# Soldotna

### KPC PT Program Coordinator: David Spann • (907) 283-0365 • Kenai Peninsula College, Rm 204-C • 34820 College Drive

76709	PRT	A160	I10	Oil & Gas Exploration & Production I3 CR	Spann, Dav	vid Mo	on/Wed	10:00-11:15 AM	KPC 112
76714	PRT	A101	I20	Introduction to Process Technology	3 CR	Spann, David	Monday	5:30-8:15 PM	KCHS
76715	PRT	A101	I21	Introduction to Process Technology	3 CR	Spann, David	Wednesday	7:00-9:45 PM	KPC 112
76717	PRT	A110	I20	Introduction to Occupational Safety	3 CR	TBA	Tuesday	7:00-9:45 PM	KPC 135
76720	PRT	A144	I10	Industrial Process Instrumentation II	3 CR	Houtz, Alan	Mon/Wed	8:15-9:55 AM	KPC 112
76722	PRT	A230	I20	Process Technology II: Systems	4 CR	Peterson	Mon/Wed	11:30-12:45 AM	KPC 112
	PRT	A230L	I20	Process Technology II: Systems Lab		TBA	Thursday	7:00-9:45 PM	KPC 105/106A
76724	PRT	A255	I30	Quality Concepts for the Process Industry	1 CR	Murray	Wednesday	7:00-9:45 PM	KPC 135 [9/1-29/04]

### **Course Descriptions:**

### Introduction to Process Technology

Introduction to process operations in industry through a non-mathematical overview of general information, processes, procedures, and equipment an operator would be expected to know.

### Introduction to Occupational Safety/Health and Safety

Provides an overview/introduction to the field of safety, health, and environment within the process industry. This course will cover various types of plant hazards, safety and environmental systems/equipment, and applicable government reg's and industry standards.

### **Instrumentation I**

Prerequisite: MATH A055. Covers physics of pressure, temperature, level, and flow measurement; mechanical and electrical aspects of instruments used to control dynamics of processes. Also covers dynamics of automatic control including proportional control, automatic reset, derivative action, and integral timing.

### **Quality Concepts for the Process Industry**

Prerequisite: PRT A231. Introduction and application of current quality concepts used by the process technician. Includes the role of statistical processes used by the operator in achieving quality.

### **Industrial Process Instrumentation II**

Prerequisite: PETR A140; crosslisted with PETR A144. Continuation of PETR A140, but places emphasis on repair, maintenance, and calibration, as well as hands-on physical training on a wide variety of process instruments. Completion of many remaining chapters from PETR A140 textbook pertinent to related classes. Special note: Offered Spring Semesters.

### Process Technology II: Systems

Brings together the equipment covered in the previous courses into various systems. Shows how individual component interact as part of a system and each system works within an entire processing facility. Special attention is given to the common systems found in each Alaskan process industry. Systems topics include: upstream oil and gas production, petrochemicals and refinery processes, refrigeration, power generation, milling, boilers and heaters, coolers and head exchangers. Special Fees: One 2 hour lab per week.

### Oil & Gas Exploration and Production I

Surveys oil & gas exploration and production issues: marketing, geology, reservoir economics, legal aspects of resource ownership, drilling & production technologies, production separation, safety and environmental issues.