

THE COLLEGE OF NURSING Advising Offices are Located in:

113 Henderson Hall (330) 672-7930 http://dept.kent.edu/nursing

COLLEGE OF NURSING

The Kent State University College of Nursing provides a course of study at both the baccalaureate and master's level. After completion of the required course of study in the arts and sciences and professional nursing, graduates receive the degree of Bachelor of Science in Nursing and are eligible to apply to take the state licensing examination to become professional registered nurses. Two additional years of study lead to the degree of Master of Science in Nursing with clinical focus in adult, psychiatric mental health or parent child nursing, and role function options in administration, education, clinical specialization or nurse practitioner.

Accreditation

The baccalaureate and master's programs are accredited by the National League for Nursing Accrediting Commission and have preliminary approval from the Commission on Collegiate Nursing Education. The baccalaureate nursing program is approved by the State of Ohio Board of Nursing.

Aims of the Program

The specific purposes of the baccalaureate nursing program are to prepare practitioners for the beginning practice of professional nursing; to provide a base for the continuing development of the students as individuals, as citizens and as professional practitioners of nursing; and to provide a foundation for graduate study in nursing.

The College of Nursing is committed to the education of professionals in nursing within the perspective of today's society. The faculty believes that the foremost aim of such education is the acquisition of knowledge and unique specialized skills of the nursing profession. Professional education for nursing lays a foundation for the proficient and competent performance of nursing practice, based on scientific principles, and entailing self-directed activities and discriminative judgments.

The faculty believes that professional education in nursing stresses the development of high ethical standards and moral values, which enable future practitioners to make essential contributions to public welfare and social progress. Professional education in nursing strives to develop communication skills and personality traits for effective interpersonal relationships and provides a base for continuing study and for personal, social and professional development.

The program in nursing stresses the application of physical, biological and social sciences to professional nursing practice. Throughout the program, students learn to give professional nursing care to children and adults of various age groups in acute care, home and community settings.

Student Awards

Awards available through the College of Nursing include the Award for Excellence in Nursing Practice, the Award for Leadership/Service and the Judith Hollander Bess Award for Academic Excellence. College of Nursing scholarships include the Vincent A. and Corine S. Chiarucci Founders Medallion Scholarship, the Victoria C. T. Read Founders Medallion Nursing Scholarship, The College of Nursing Alumni Council Kare Scholarship and the Dean Davina J. Gosnell Scholarship.

Liberal Education Requirements

All students graduating with a baccalaureate degree from Kent State University must have completed 36 semester hours of LERs. These requirements normally are to be fulfilled within the first 60 semester hours of enrollment. These courses reflect Kent State's LERs as they are further specified by the nursing curriculum. These requirements are:

I.	Compo	osition	6
	ENG	10001, 10002, College English I, II	
II.	Mathe	matics, Logic and Foreign Languages	6
	Select	from the LERs on Page 77.	
III.	Humai	nities and Fine Arts	9
	Select	from the LERs on Page 78.	
IV.	Social	Sciences	9
	PSYC	11762, General Psychology	
	SOC	12050, Intro. to Sociology	
	One co	ourse	
	Select	from the LERs on Page 78.	
V.	Basic	Sciences	0
	CHEM	10050, Fundamentals of Chemistry	
		Choose one from:	
		10052, Introduction to Organic Chemistry (2)	
		10054, Gen. and Elem.Organic Chemistry (5)	
	BSCI	20020, Biological Structure and Function	

Diversity Course Requirement

Students graduating with a Bachelor of Science in Nursing complete two courses chosen from the Diversity Course Requirements. One course must be taken as part of the Liberal Education Requirements (LER) and the second from the courses listed on Page 81 of this *Catalog*.

Writing-Intensive Course Requirement

Refer to either Pages 64 or 84-85 of this *Catalog* for specific information on the Writing-Intensive Course Requirement.

Program of Study

The program of study includes 129 semester hours of study in arts and sciences and professional nursing courses directed toward preparing graduates who:

- 1. Use critical and analytical thinking in the application of the nursing process to provide health care to clients-individuals, families, communities and groups.
- Establish effective relationships in the delivery of nursing care through the use of interpersonal, written and electronic means.
- 3. Assume responsibility for their personal and professional growth and nursing actions.
- 4. Participate with the interdisciplinary and intradisciplinary team to facilitate ongoing improvement in the delivery of health care services.
- 5. Participate in the use of technology in a wide variety of settings in the provision of health care services.
- 6. Use basic knowledge of the research process in nursing practice.
- 7. Assume the roles of professional nurses.

Program Requirements

I.	FIRST	YEAR (Prenursing)
	BSCI	20020, Biol. Structure and Function
		20021, Basic Microbiology
	CHEM	10050, Fundamentals of Chemistry**
		10052, Intro. to Organic Chemistry**
	ENG	10001, 10002, College English I, II6
	NURS	10050, Intro. to Professional Nursing1
	PSYC	11762, General Psychology
	SOC	12050, Intro. to Sociology
	US	10001, University Orientation1
	Diversi	ity****
	Social	Science***
II.	SECON	ID YEAR
	BSCI	30030, Human Physiology4
		30050, Human Genetics
	CHEM	20284, Physiological Chemistry4
	NURS	10020, Basic Cardio Life Support
		20000, Professional Nursing Issues
		20020, Foundations of Assessment
		and Comm. in Nursing
		20030, Foundations of Nursing Intervention5
		20950*Human Growth and Development
		for Health Professionals
	NUTR	33512, Nutrition for the Family
	Electiv	es from Math/Logic/or Foreign Languages***6
III.	THIRD	YEAR
	NURS	30000, Professional Nursing Concepts

	TOTAL	129
Elective from I	Fine Arts***	
PSYC or SOC	elective (upper-division)	
40872	, Intro. to Nursing Research	
40050	, Nursing Integration Practicum	
40040	, Leadership and Management in Nursing 4	
	Mental Health Nursing Care	
40030	, Psychiatric Nursing and	
40020	, Community Health Nursing4	
40010	, Nursing of the Critically III	
NURS 40000	, Professional Nursing Development2	
FOURTH YEAR	R	.30
Electives from	Humanities***6	
SOC 32220	, 32221, Data Analysis (4)	
PSYC 21621	, Quant. Methods in Psych. (3)	
MATH 10041	, Elem. Prob. and Statistics (3)	
Statistics (on	e of the following)3	
	Nursing Practice	
30060	, Basic Pharmacology for	
30050	, Basic Nursing Informatics	
	Needs and/or Gerontologic Changes 4	
30040	, Nursing of Adults with Rehab.	
30030	, Nursing of Adults5	
30020	, Health Care of Children 4	
30010	, Parent and Newborn Nursing	

*Offered fall semester only.

IV.

**Regional Campus students may substitute CHEM 10054 for CHEM 10050 and 10052.

***See nursing LERs, Page 329.

****See diversity courses Page 81.

Elective nursing courses: Special nursing courses will be offered periodically by nursing faculty and may be taken as electives by nursing students. These courses are listed in the Catalog.

CPR, Basic Cardiac Life Support certification is required of all nursing students. The course NURS 10020, CPR is provided for those needing certification.

Major clinical facilities utilized for students' learning experiences include Cleveland Clinic, University Hospitals, Brecksville Veteran's, University Settlement, Jennings Hall, Health Hill and Metro-Health in Cleveland; Akron General Medical Center, Summa Health System—Akron City and St. Thomas hospitals, and Children's Hospital Medical Center of Akron; Belcher Apartments, Robinson Memorial Hospital and the Kevin Coleman Mental Health Center in Ravenna; Mercy Medical Center in Canton; Park Vista and St. Elizabeth Medical Center in Youngstown; Trumbull Memorial Hospital and St. Joseph's in Warren; Massillon Community Hospital; Hattie Larlham Foundation in Mantua; The Summit County Health Department; The Cleveland Health Department; The Trumbull County Visiting Nurse Agency; Robinson Memorial Hospital Visiting Nurse and Hospice; Alliance Visiting Nurse Agency; and various other social and health agencies. These facilities are subject to change and availability.

Transportation is provided from the campus to clinical facilities by the Campus Bus Service with the exception of one semester in the senior year when students <u>must</u> have access to the use of a car while enrolled in Nursing in the Community.

ADMISSION PRENURSING

New Freshmen

Admission will be granted to those students who have completed a strong academic pattern of courses in high school. In addition to meeting all general university requirements, it is essential that applicants present study in chemistry, biology and mathematics from high school. A high school GPA of 2.70 (on a 4.0 scale) is also required.

An ACT composite score of 22 and 22 in scientific reasoning is the minimum expected to receive favorable consideration.

Transfer Students

In addition to meeting all general university requirements for admission, transfer students should contact the College of Nursing regarding special information and deadlines.

Transfer students will be admitted to the College of Nursing on an individual basis.

Students wishing to transfer from another baccalaureate nursing program should consult directly with the College of Nursing at the time of application to the university.

Second Degree Students

Persons with a non-nursing degree wishing to pursue the study of nursing should consult with the College of Nursing at the time of application to the university.

Licensed Practical Nurses

L.P.N.s admitted to the nursing sequence enroll in a role transition course and may establish credit-by-examination for selected sophomore-level nursing courses. An appointment should be made for advising through the College of Nursing at the time of application.

Sophomore Nursing Sequence

Limitations on available space for sophomore nursing majors necessitate a selective admission process. The sophomore nursing sequence begins only in the fall semester of each year. Preference is given to applicants who:

- 1. Complete BSCI 20020, 20021 and CHEM 10050, 10052 *or* CHEM 10054, with a minimum of a 2.50 GPA in these sciences;
- 2. Complete a minimum of 30 semester hours with a 2.50 or higher GPA.

In February of the freshman year, prenursing students should apply directly to the College of Nursing for admission to the sophomore nursing sequence. Selection for the sophomore nursing sequence is made by a faculty committee of the College of Nursing beginning in June of each year.

Registered Nurses

Registered nurses admitted to the program may take examinations to establish credit in selected nursing courses. In addition, credit may be established in selected arts and sciences courses through examination. Transition nursing courses are available for registered nurses. Eighteen semester hours of required nursing courses are available via distance learning technology.

Kent's Eight-Campus Network

The first year of the baccalaureate nursing program is available on all eight campuses. The second year is offered at the Kent, Ashtabula, Salem, Stark and Trumbull campuses. Senior-level nursing courses are available at these same campuses via interactive computer technology. Advising is provided at each campus.

Progression

Progression and continuance in the program is based upon successful scholastic achievement and personal qualities for the practice of professional nursing.

Calculation of Averages for Progression to Junior and Senior Sequence Nursing Courses.

- 1. Students must have a 2.0 cumulative GPA each semester to continue in clinical nursing.
- 2. Progression to junior nursing requires the completion of 60 semester hours with a 2.00 or higher GPA; the completion of all biology and chemistry courses as noted in program requirements with a 2.00 or higher GPA; completion of all freshman and sophomore nursing courses with a 2.00 or higher GPA in each nursing course. In addition, N10050, Intro to Professional Nursing, normally is completed prior to the

sophomore nursing sequence, but must be completed with a grade of C or higher prior to beginning the junior nursing sequence.

 Progression to senior nursing courses requires the completion of 90 semester hours with a 2.00 or higher GPA; the completion of all junior nursing courses; a 2.00 minimum GPA in each sophomore and junior nursing course.

Repeat of Clinical Nursing Courses:

Each clinical course may be repeated one time only. Students may repeat no more than two clinical nursing courses throughout the program. Only one sophomore clinical course may be repeated. A withdrawal will be considered a repeat of the course if the students are failing theory and/or have an unsatisfactory in clinical at the time of withdrawal.

Students attaining two failures in clinical nursing courses are automatically dismissed from the nursing program. A clinical course in which an F is received must be repeated before progression in any other clinical course. A grade of at least a C must be obtained on repeat to avoid dismissal from the nursing program.

Graduation

The degree of Bachelor of Science in Nursing is granted to students who complete the planned program of study with a cumulative GPA of at least 2.00 (C) and a 2.00 or higher in biology and chemistry courses, and a minimum 2.00 in each nursing course. Students also need to meet all other university requirements for graduation and complete a minimum of 32 semester hours at Kent State.

Expenses and Financial Aid

In addition to the regular university expenses, nursing school <u>costs</u> <u>for the four years include:</u> Uniforms, \$80 (Payable prior to beginning sophomore nursing) Nurse Liability Insurance, \$99 Clinical Nursing Laboratory Fee, approximately. \$800 Senior-Year Expenses, \$700 (These expenses are approximate and will vary as the charges vary. Examples of the expenses included are the state licensure application fee, NCLEX-CAT fee, College of Nursing pin, pictures for licensure and the NCLEX-CAT review.)

In addition to the regular university financial aid, nursing students are eligible for financial assistance, which is exclusively for nursing students, such as:

- The Federal Nursing Scholarship Program
- Jay S. Cole Scholarship
- Federal Nursing Student Loan Program

- The Elizabeth Hudak Memorial Fund (Short-term emergency loan fund)
- Work Agreement Scholarships with health care agencies
- Cleveland Clinic Foundation Nursing Education Grant Program
- Akron General Medical Center Service League Scholarship
- University Hospitals of Cleveland Tuition Assistance Plan
- The Army, Air Force and Navy Nurse Corps Student Programs





THE SCHOOL OF TECHNOLOGY Advising Offices are Located in:

> 119 Van Deusen Hall (330) 672-2892 http://www.tech.kent.edu

335

SCHOOL OF TECHNOLOGY

Statistics indicate that at the start of the 21st century employment opportunities will be the greatest in high-technology fields. Kent State University's School of Technology, part of Kent State's eight-campus network, offers technology-based programs that will provide students with the skills needed to compete in today's job market.

With more than 25 programs offered—at the certificate, associate's, bachelor's and master's degree levels throughout Kent's eight-campus network, a talented faculty and flexible class schedules that include evening, weekend, distance learning and Web-based classes, the School of Technology has a program to match your needs and interests. Academic programs are divided into three areas: aeronautics, applied business technologies and applied science and technology.

On the Kent Campus, the School of Technology offers four-year programs in aeronautics, industrial technology, technology education teacher preparation and technology. At Kent State's seven Regional Campuses, the school has the following two-year degrees; *Associate of Applied Business, Associate of Applied Science* and the *Associate of Technical Studies*. Programs in these areas include technology, computer technology, business technology, industrial technology, engineering technology and environmental technology. These programs are described under *Regional Campuses*.

Many of the credits earned in the school's associate's degrees can be applied toward the "2+2" program for a B.S. degree in technology or industrial technology. These programs are described under "2+2" *Concentration for Associate's Degree Graduates*.

Note: To receive a baccalaureate degree from the School of Technology, students must, in addition to other requirements, satisfy the 36-hour minimum stipulated in the LERs. (See Pages 77-80.)

Cooperative Education

Cooperative education permits students with technical jobs to capture learning experiences at their place of employment for credit in their college curriculum. Qualified students work with their assigned faculty mentor to define the nature and technical scope of the learning involved. In most cases the faculty mentor will visit the place of employment and discuss the task with the student's supervisor. At the conclusion of the effort a report is required to summarize the work completed and the knowledge acquired.

This is available to School of Technology majors of sophomore rank or above with a 2.25 or better overall GPA. Students working full-time can earn 2 hours a semester; 1 credit may be earned for half-time work. This course is repeatable to a maximum of 6 credits; however, some programs limit use of co-op credits to fulfill graduation requirements.

Writing-Intensive Course Requirement

Refer to either Pages 64 or 84-85 of this *Catalog* for specific information on the Writing-Intensive Course Requirement.

BACHELOR OF SCIENCE DEGREE

Technology

This program provides a liberal education within our technological culture for students contemplating careers in technical-industrial fields or as a technology education teacher. Courses in the major provide breadth of technical experience, while electives may be utilized to increase competencies in one or more areas. Students planning to become technology education teachers take the minor in Technology Education Licensure in lieu of the technology electives and general electives.

I.	Compo	osition
	ENG	10001, 10002, College English I, II6
		20002, Introduction to Technical Writing
II.	Mathe	matics, Logic and Foreign Languages
	MATH	12001, Algebra and Trigonometry
	Select	3 hours from the LERs
III.	Huma	nities and Fine Arts
	COMN	15000, Theory and Practice of Oral Discourse
	Select	6 hours from the LERs6
IV.	Social	Sciences
	PSYC	11762, General Psychology3
		31773, Industrial Psychology
	Select	6 hours from the LERs6
V.	Basic	Sciences
	At leas	t 6 hours must be from courses that include a laboratory
	сотро	onent. The remaining 3 hours may be from LERs.
VI.	US 10	001, University Orientation
VII.	Major	Requirements:
	Techn	ology Core
	TECH	10001, Information Technology3
		13580, Engineering Graphics I
		20001, Energy/Power
		20002, Materials and Processes
		21021, Survey of Electricity and Electronics
	Techn	ology
	TECH	11071, Woods Technology I
		21046, Graphic Communication Tech. I
		31000, Cultural Dynamics of Technology3
		31015, Construction Technology3

School of Technology

	2
--	---

Note: Upper-division technology electives must be chosen with faculty adviser.

Students must complete technology core sequence and all required lower-division math and science courses before registering for upper-division technology courses.

Minimum of 39 upper-division hours required.

Minimum of 2.00 overall GPA is required. (NOTE: Students completing the Technology Education Licensure minor must maintain a minimum 2.5 overall GPA, and a 2.75 in the major.)

Minimum of 2.25 GPA required in major. (NOTE: Students completing the Technology Education Licensure minor must maintain a minimum 2.75 GPA in the major.)

"2+2" Concentration for Associate's Degree Graduates

This "2+2" concentration provides a variety of options for associate's degree graduates who wish to advance their careers in technical environments. It allows graduates to apply all, or nearly all, of the coursework completed in their associate's degree program toward the Bachelor of Science degree. Five options are available. The general option permits graduates from a variety of associate's degree backgrounds to formulate a program of advanced study in upper-division technical courses, chosen with a faculty adviser, to gain additional technical depth or breadth. The general electives in this option can be used to earn a minor from another academic unit to complement their major study. The four other options are based on specific associate's degrees and offer a more focused Bachelor of Science completion utilizing specific upper-division courses in the specific area of specialization.

General Option

I.	US 10	001, University Orientation1
II.	Comp	osition
	ENG	10001, 10002, College English I,II
		Choose one from:
	ENG	20001, Business Writing (3)
		20002, Introduction to Technical Writing (3)

			TOTAL	121
	Minimum of 12 hou	urs upper-division.		
IX.	General Electives			28
	Courses must be up	pper-division.		
VIII.	Technology Electiv	/es		15
	Credits from approv	ved associate's degree.		
VII.	Technology Major	Requirements		34
	remaining 3 hours i	from LERs.		
	At least 6 hours mu	ist be laboratory science c	ourses. Select th	ne
VI.	Basic Sciences			9
	Select 9 hours from	n LERs.		
V.	Social Sciences .			9
	Select 9 hours from	n LERs.		
IV.	Humanities and Fir	ne Arts		9
	12001, Alge	ebra and Trigonometry (4)		
	MATH 11011, Colle	ege Algebra (4)		
	Choose one	e from:		4
	Select 3 hours from	n LERs		3
III.	Mathematics, Logi	ic and Foreign Languages		7
	ITAP 26638, Busi	iness Communications (3)		

Notes: Graduation from the program requires an approved associate's degree. Minimum of 2.00 overall GPA required with a minimum of 2.00 in upper-division TECH courses. Upper-division technology electives must be chosen with faculty adviser. The courses chosen to fulfill the curriculum must satisfy university Diversity and Writing-Intensive Course Requirements. Minimum of 27 hours of upper-division coursework required for technology associate's degree graduates.

Computer Design and Animation Engineering Technology Option

I.	US 10001, University Orientation1		
П.	Compo	osition	
	ENG	10001, 10002, College English I,II	
		20002, Introduction to Technical Writing	
III.	Mathe	matics, Logic and Foreign Languages	
	MATH	11011, College Algebra4	
		11022, Trigonometry	
		11012, Intuitive Calculus	
IV.	Huma	nities and Fine Arts	
	COMN	15000, Theory and Practice of Oral Discourse	
	PHIL	21001, Introduction to Ethics	
		Choose one from:	
	ART	22006, Art History I (3)	
		22007, Art History II (3)	
V.	Social	Sciences	
	ECON	22060, Principles of Microeconomics	
		22061, Principles of Macroeconomics	
	SOC	12050, Introduction to Sociology	
VI.	Basic	Sciences	

336

~	

	PHY	11030, Seven Ideas that Shook the Universe
		12201, Technical Physics I
	Select	from LER lab sciences
VII.	Major	Requirements
	Credits	s for Associate of Applied Science in Computer Design and
	Anima	tion Technology.
VIII.	Techn	ology Electives
	TECH	33016, PC Network Engineering
		34000, Computer Animation II
		34001, Computer Animation III
		34002, Advanced CAD II
		34003, Animation Theory3
		34004, Light, Color, Design, Layout
		43000, Adv. Animation Development
		43001, Tech. of Media. And Film Production
		43002, Graphics Design Technology
		43003, Mult. & Virtual Reality II
		43004, Unix Scripting w/ Applications
IX.	Relate	d Courses
	ART	14000, Drawing I
	BMRT	11000, Introduction to Business
	IERT	22006, Econ. Decision Analysis
	TECH	33056, Cooperative Education
		Choose one from:
	COMT	21092, Computer Practicum (2)
	IERT	22095, ST: Productivity Software (2)
		TOTAL 121

Notes: Graduation from the program requires an approved associate's degree. Minimum of 2.00 overall GPA required for graduation with minimum of 2.00 in upper-division TECH courses. Upper-division technology electives must be chosen with faculty adviser.

Electrical/Electronic Engil	neering Technology Option
-----------------------------	---------------------------

I.	US 100	001, University Orientation1
II.	Compo	osition
	ENG	10001, 10002, College English I,II
		20002, Introduction to Technical Writing
III.	Mathe	matics, Logic and Foreign Languages
	MATH	11011, College Algebra (4)
		and
		11022, Trigonometry (2)
		or
		12001, Algebra and Trigonometry (4)
		Choose one from:
	MATH	11012, Intuitive Calculus (3)
		12002, Analytic Geometry and Calculus I (5)
		19002, Technical Math II (4)
IV.	Humar	nities and Fine Arts
	COMM	15000, Theory and Practice of Oral Discourse

	PHIL	21001, Introduction to Ethics
	Choos	e one Fine Arts Elective
V.	Social	Sciences
	ECON	22060, Principles of Microeconomics
	Select	from the LERs
VI.	Basic	Sciences
	PHY	13001, General College Physics I
		13002, General College Physics II
VII.	Major	Requirements
	Credits	s for Associate of Applied Science in Electrical/
	Electro	onics Engineering Technology.
VIII.	Techn	ology Electives
	TECH	31020, Automated Manufacturing
		33016, PC Network Engineering
		33363, Metallurgy & Matl. Science
		Choose one from:
	TECH	31000, Cultural Dynamics of Technology (3)
		33056, Cooperative Education (3)
		Choose two from:
	TECH	31032, Power Technology (3)
		33223, Electronic Communication (3)
		43220, Electrical Machinery (3)
IX.	Gener	al Electives
	Minim	um of 12 hours upper-division.
		ΤΟΤΔΙ 121

Notes: Graduation from the program requires an approved associate's degree. Minimum of 2.00 overall GPA required for graduation with minimum of 2.00 in upper-division TECH courses. Upper-division technology electives must be chosen with faculty adviser. The courses elected to fulfill the curriculum must satisfy university Diversity Requirements.

	Manuf	acturing/Mechanical/Systems Engineering Technology Option
Ι.	US 100	001, University Orientation
II.	Compo	sition
	ENG	10001, 10002, College English I,II6
		Choose one from:
	ENG	20001, Business Writing (3)
		20002, Introduction to Technical Writing (3)
	ITAP	26638, Business Communications (3)
III.	Mathe	matics, Logic and Foreign Languages
	MATH	11011, College Algebra (4)
		and
		11022, Trigonometry (2)
		or
		12001, Algebra and Trigonometry (4)
		Choose one from:
	MATH	11012, Intuitive Calculus (3)
		12002, Analytic Geometry and Calculus I (5)

		19002, Technical Math II (4)
IV.	Huma	nities and Fine Arts
	COMM	1 15000, Theory and Practice of Oral Discourse
	PHIL	21001, Introduction to Ethics
	Choos	e one Fine Arts elective3
۷.	Social	Sciences
	Select	from the LERs9
VI.	Basic	Sciences
	PHY	13001, General College Physics I
		13002, General College Physics II
VII.	Major	Requirements
	Credit	s from Associate of Applied Science in Manufacturing,
	Mecha	anical, or Systems/Industrial Engineering Technology.
VIII.	Techn	ology Electives
		Choose from the following:
	TECH	31065, Cast Metals (3)
		31020, Automated Manufacturing (3)
		31032, Power Technology (3)
		32002, Materials and Processes II (3)
		33016, PC Network Engineering (3)
		33033, Hydraulics and Pneumatics (3)
		33363, Metallurgy & Matl. Science (3)
		34002, Advanced CAD II (3)
		43080, Industrial and Environmental Safety (3)
		43220, Electrical Machinery (3)
		43550, Computer Aided Manufacturing (3)
		Choose one from:
	TECH	31000, Cultural Dynamics of Technology (3)
		33056, Cooperative Education (3)
IX.	Gener	al Electives
	Minim	num of 6 hours upper-division.

Notes: Graduation from the program requires an approved associate's degree. Minimum of 2.00 overall GPA required for graduation with minimum of 2.00 in upper-division TECH courses. Upper-division technology electives must be chosen with faculty adviser. The courses elected to fulfill the curriculum must satisfy university Diversity Requirements.

TOTAL

121

	Plastics Manufacturing Engineering Technology Option US 10001, University Orientation			
I.				
II.	Compo	Composition		
	ENG	10001, 10002, College English I,II		
		Choose one from:		
	ENG	20001, Business Writing (3)		
		20002, Introduction to Technical Writing (3)		
	ITAP	26638, Business Communications (3)		
III.	Mathe	matics, Logic and Foreign Languages		
	MATH	11011, College Algebra (4)		

	and
	11022, Trigonometry (2)
	or
	12001, Algebra and Trigonometry (4)
	Choose one from:
	MATH 11012, Intuitive Calculus (3)
	12002, Analytic Geometry and Calculus I (5)
	19002, Technical Math II (4)
IV.	Humanities and Fine Arts
	COMM 15000, Theory and Practice of Oral Discourse
	PHIL 21001, Introduction to Ethics
	Choose one Fine Arts elective
V.	Social Sciences
	ECON 22060, Microeconomics
	Select from the LERs
VI.	Basic Sciences
	Select from the LERs9
	At least 2 classes must be laboratory science.
VII.	Major Requirements
	Credits from Associate of Applied Science in Plastics Manufac-
	turing Engineering Technology.
VIII.	Technology Electives
	TECH 31020, Automated Manufacturing (3)
	31032, Power Technology (3)
	32002, Materials and Processes II (3)
	33363, Metallurgy & Matl. Science (3)
	43080, Industrial and Environmental Safety (3)
IX.	General Electives
	Minimum of 12 hours upper-division.
	TOTAL 121

Notes: Graduation from the program requires an approved associate's degree. Minimum of 2.00 overall GPA required for graduation with minimum of 2.00 in upper-division TECH courses. The courses elected to fulfill the curriculum must satisfy university Diversity Requirements.

BACHELOR OF SCIENCE DEGREE

Aeronautics

The programs offered under the B.S. in aeronautics consist of four separate areas of study. All four programs lead to a Bachelor of Science in Aeronautics.

Requirements for Admission for High School Students into the Aeronautics Programs

While Kent State University is an open admissions university that offers admission to Ohio students who are graduates of accredited high schools, admission to the aeronautics programs is limit-

ed and highly selective. Only students who have earned a 2.25 high school cumulative GPA will be considered for admission. Students not admitted to the programs may qualify for admission to the university as an undeclared major in the School of Technology. These students may be admitted to the aeronautics programs any time after the first semester of studies if they have earned a cumulative GPA of 2.25 or above.

All applications must include the \$30 application fee, official American College Test (ACT)/Scholastic Aptitude (SAT) scores, and an official high school transcript that shows class rank and coursework in ninth, 10th and 11th grades, as well as the courses that are being taken or will be taken in the senior year. Transcripts that do not show class rank and senior courses cannot be considered.

Requirements for Admission for Transfer Students

Only transfer students with a GPA of 2.25 or above will be considered for admission. This GPA must be based upon a minimum of 24 semester hours of college-level work. (Students with less than 24 semester credit hours will be considered with the high school student pool.)

All applications must include the \$30 application fee and official transcripts showing all previously completed coursework.

All students requesting transfer of credit for technology courses taken at another school shall present a list of such courses to the program adviser for review and assessment. No credit will be given for courses with grades less than C.

Requirements for Admission From Another Program

Students already enrolled at Kent State University who desire to change majors to the aeronautics programs must apply on the appropriate form to the Office of the Dean, School of Technology. Minimum GPA to change major to the aeronautics programs is 2.25. All applications must include official transcripts showing all previously completed coursework.

Aeronautics Programs

The aeronautics programs consist of four separate areas of study: aeronautical studies, aeronautical systems engineering technology, aviation management and flight technology.

Aeronautical Studies

The aeronautical studies program prepares students for entry-level technological positions in aviation and related areas. The program is focused on a fundamental foundation of aeronautically related subjects, but at the same time, provides a significant number of

course electives that allow students to explore other areas of interest or earn a minor in a particular area of study. The program requirements include 35 semester hours of required technology and aeronautics courses, and 38 semester hours of technology and general electives coursework. Students who successfully complete all degree requirements for this program are awarded a Bachelor of Science in Aeronautics with a concentration in aeronautical studies.

			TOTAL	121
		**General electives		
VIII.	Non-N	Najor Requirements		.20
		**Technology electives (18)		
	Techn	ology Electives		
		45350. Avionics		
		45291. Aero Senior Seminar		
		45150 Applied Elight Dynamics I		
		45030 Aircraft Systems II		
		25150 Aircraft Structures	ა ი	
		35020, AIRCRAFT Propulsion Systems	პ ი	
	TECH	25020 Aircraft Dropulsion Systems		
	Aeron	15000 Introduction to Aproposition		
	A	33033, Hydraulics and Pneumatics		
		21021, Survey of Electricity and Electronic	s 4	
		20002, Materials and Processes		
		13580, Engineering Graphics I	3	
	TECH	10001, Information Technology	3	
	Techn	ology Courses		
VII.	Major	Requirements		.56
VI.	US 10	001, University Orientation	•••••	1
		13002, General College Physics II	5	
	PHY	13001, General College Physics I		
V.	Basic	Sciences		.10
	Select	9 hours from Social Sciences LERs		
IV.	Social	l Sciences	•••••	9
	Select	6 hours from Fine Arts LERs		
	COMN	1 15000, Theory and Practice of Oral Discou	ırse3	
III.	Huma	nities and Fine Arts (two courses in seque	nce)	9
	ł	* 12001, Algebra and Trigonometry	4	
	MATH	11012, Intuitive Calculus	3	
11.	Mathe	matics, Logic and Foreign Languages .		7
		20002, Introduction to Technical Writing	3	
	ENG.	10001, 10002, College English I, II	6	
I.	Comp	osition		9

Students must complete all lower-division math, basic science and technology courses before registering for upper-division technology courses.

A minimum of 39 upper-division hours within the 121 total semester hours are required.

A minimum of 2.25 GPA in the major requirements and a minimum of 2.00 overall GPA are required.

Students must also satisfy the university Diversity Requirements.

*MATH 12001, which is a prerequisite for MATH 12002, should be bypassed by students with sufficient background.

**Note: A total of at least 17 upper-division hours must be taken in the technology electives area and/or the general electives area.

American Assembly of Collegiate Schools of Business accreditation standards prohibit nonbusiness majors from taking more than 25 percent of their degree requirements in business courses. Therefore, no more than 30 semester credit hours may be counted toward stated degree requirements.

Aeronautical Systems Engineering Technology

The aeronautical systems engineering technology program prepares students to enter the field of aeronautical engineering as technologists with educational experience in the practical application of theoretical principles. The program includes advanced mathematics and physics courses to complement engineering-related courses in aeronautics technology. Students entering this program should have an extensive background in high school mathematics and science.

I.	Composition		
	ENG	10001, 10002, College English I, II6	
		20002, Introduction to Technical Writing	
II.	Mathe	matics, Logic and Foreign Languages	
	CS	10061, Introduction to Computer Programming3	
	MATH	*12001, Algebra and Trigonometry	
		12002, Analytic Geom. and Calculus I 5	
		12003, Analytic Geom. and Calculus II5	
		21001, Linear Algebra3	
		22005, Analytic Geom. and Calculus III	
III.	Humar	nities and Fine Arts	
	COMM	15000, Theory and Practice of Oral Discourse	
	Select	6 hours from Humanities and Fine Arts LERs	
IV.	Social	Sciences	
	ECON	22060, Principles of Microeconomics	

			TOTAL	127
	Techno	blogy elective		_
VIII.	Non-M	ajor Requirement		3
		45700, Aircraft Design		
		45151, Applied Flight Dynamics II		
	TECH	45121, Adv. Aerospace Propulsion \ldots .		
	Relate	d Courses		
		45350, Avionics	3	
		45291, Aero. Senior Seminar	1	
		45150, Applied Flight Dynamics I		
		45030, Aircraft Systems II	3	
		35150, Aircraft Structures	3	
		35040, Aircraft Systems I	3	
		35020, Aircraft Propulsion Systems	3	
	TECH	15000, Introduction to Aeronautics	3	
	Aerona	autics Core		
		33111, Strength of Materials		
		33363, Metal. & Material Science		
		33222. Digital Design and Applications		
		33033. Hydraulics/Pneumatics		
		23581. Computer Aided Engineering Gran	hics 3	
		21021 Survey of Electricity and Electronic	······5	
		20002 Materials and Processes	3 2	
	TEUN	13580 Engineering Graphics I		
	тесни	10001 Information Technology	28 28 د	
VII.	Toche			.00
VI.	US IU	Do I, University Orientation		I
M	116 10	23102, General University Physics II		1
	PHY	23101, General University Physics I	5	
	CHEM	10050, Fundamentals of Chemistry		
V.	Basic	Sciences		.13
	Select	3 hours from the Social Sciences LERs		
		22061, Principles of Macroeconomics	3	

Students must complete all lower-division basic science and technology courses before registering for upper-division technology courses.

A minimum of 39 upper-division hours within the 127 total semester hours are required.

A minimum 2.25 GPA in the major requirements and a minimum 2.00 overall GPA are required.

Students must also satisfy the university Diversity Requirements.

*MATH 12001, which is a prerequisite for MATH 12002, should be bypassed by students with sufficient background.

School of Technology

American Assembly of Collegiate Schools of Business accreditation standards prohibit nonbusiness majors from taking more than 25 percent of their degree requirements in business courses. Therefore, no more than 30 semester credit hours may be counted toward stated degree requirements.

Aviation Management

The aviation management program prepares students for entrylevel positions in aviation and other aviation-related professional fields. This course of study combines technical and aeronautical courses with courses in management and information systems.

Students entering this program should have a technical interest, mathematical proficiency and an ability to develop analytical and communicative capabilities.

I.	Composition		
	ENG	10001, 10002, College English I, II 6	
		Choose one from:	
		20002, Introduction to Technical Writing (3)	
		20001, Business Writing (3)	
II.	Mathe	matics, Logic and Foreign Languages	
	CS	10061, Introduction to Computer Programming3	
	MATH	*12001, Algebra and Trigonometry	
		11012, Intuitive Calculus	
III.	Huma	nities and Fine Arts	
	COMM	1 15000, Theory and Practice of Oral Discourse	
	Select	6 hours from Humanities and Fine Arts LERs6	
IV.	Social	Sciences	
	ECON	22060, Principles of Microeconomics	
		22061, Principles of Macroeconomics3	
	PSYC	11762, General Psychology3	
V.	Basic	Sciences	
	PHY	13001, General College Physics I	
		13002, General College Physics II5	
VI.	US 10	001, University Orientation	
VII.	Major	Requirements	
	Techn	ology Courses	
	TECH	10001, Information Technology3	
		13580, Engineer. Graphics I	
		20002, Materials and Processes	
		21021, Survey of Electricity and Electronics4	
		23581, Computer Aided Engineering Graphics3	
		33033, Hydraulics/Pneumatics	

	100111		TOTAL	121
VIII.	Techn	ajor Requirements		z
viii	Nonm	35341, Air Trans. Systems		່ າ
	TECH	35340, Airport Management		3
		34060, Operations Management		3
		34053, Data Integration		3
		34045, Small Systems Technology		3
		34032, Data and File Technology		3
		24163, Principles of Management		3
		24000, Systems Analysis 1	nt	3
	IVI&IS	24050, Fundamentals of Business Statist 24060, Systems Analysis I	ICS	2
	Relate	24 Courses		<i>.</i>
		45350, Avionics.		3
		45291, Aero. Senior Seminar		1
		45150, Applied Flight Dynamics I		3
		45030, Aircraft Systems II		3
		35150, Aircraft Structures		3
		35040, Aircraft Systems I		3
		35020, Aircraft Propulsion Systems		3
	TECH	15000, Introduction to Aeronautics		3
	Aeron	autics Core		2

Students must complete all lower-division math, basic science and technology courses before registering for upper-division technology courses.

A minimum of 39 upper-division hours within the 121 total semester hours are required.

A minimum of 2.25 GPA in the major requirements and a minimum of 2.00 overall GPA are required.

Students receive a minor in computer information systems from the College of Business Administration with this option.

Students must also satisfy the university Diversity Requirements.

*MATH 12001, which is a prerequisite for MATH 12002, should be bypassed by students with sufficient background.

American Assembly of Collegiate Schools of Business accreditation standards prohibit nonbusiness majors from taking more than 25 percent of their degree requirements in business courses. Therefore, no more than 30 semester credit hours may be counted toward stated degree requirements.

.2

Flight Technology

The flight technology program prepares students for careers in flight operations as a professional pilot. This course of study enables students to qualify for a wide range of Federal Aviation Administration flight and ground ratings required for giving professional flight and ground instruction, commercial/instrument operations in commercial aviation and regional airline operations, as well as qualifying for entrance to military flight schools. This option stresses subjects associated with flight systems, power plants, structures and electronics. Students entering this program should have a strong desire for excellence in aviation, as well as flying skills required of a professional pilot. This option is particularly designed for those students who aspire to become professional pilots.

I.	Comp	osition
	ENG	10001, 10002, College English I, II6
		20002, Introduction to Technical Writing
II.	Mathe	matics, Logic and Foreign Languages7
	MATH	11012, Intuitive Calculus3
	¥	⁶ 12001, Algebra and Trigonometry4
III.	Huma	nities and Fine Arts
	COMM	1 15000, Theory and Practice of Oral Discourse
	Select	6 hours from Humanities and Fine Arts LERs
IV.	Social	Sciences
	ECON	22060, Principles of Microeconomics
		22061, Principles of Macroeconomics
	PSYC	11762, General Psychology
V.	Basic	Sciences
	PHY	13001, General College Physics I
		13002, General College Physics II5
VI.	US 10	001, University Orientation
VII.	Major	Requirements:
	Techn	ology Courses
	TECH	10001, Information Lechnology
		21021, Survey of Electricity and Electronics
		33033, Hydraulics / Pneumatics
	Aeron	
	TECH	15000, Introduction to Aeronautics
		35020, Aircraft Propulsion Systems
		35040, Aircraft Systems I
		45030 Aircraft Sustana II
		45050, All Claft Systems II
		45150, Applied Flight Dynamics 1
		45250 Aviopics 2
	Flight	45550, AVIOINCS
	TECH	15740 Elements of Elt Theory 5
	IECH	13740, LIGHIGHIS UI FIL. HIEULY
		157/1 Driv Dilot Flight 2

		TOTAL	128
	Technology electives (2)		
Non-N	lajor Requirements		2
	45250, Aviation Law and Safety		
	45151, Applied Flight Dynamics II		
	45130, Phys. and Human Factor of Flight		
TECH	35341, Air Trans. Systems		
Relate	ed Courses		
	Display Systems (3)		
	45740, Flight Management and Electronic	:	
	45730, Applied Transport Category Aircra	aft Systems (3)	
Choos	e one from:		
	45721, Crew Resource Management Lab		
	45720, Crew Resource Management		
	45711, Turbine Engine Theory and Opera	tion Lab 1	
	45710, Turbine Engine Theory and Opera	tion	
	45653, Multi-Engine Pilot Flight	1	
	45649, Flight Instructor - Airplanes	2	
	45648, Theory of Flight Instruction	2	
	35747, Commercial Pilot Flight III	2	
	35746, Commercial Pilot Theory		
	35647. Commercial Pilot Flight II		
	35645, Instrument Pilot Flight	2	
	35644, Instrument Flight Theory	3	
	25743. Commercial Pilot Flight I		
	25250, Elements of Aviation Weather	2	

Students must complete all lower-division math, basic science and nonflight technology courses before registering for nonflight upper-division technology courses.

A minimum of 39 upper-division hours within the 128 total semester hours are required.

A minimum 2.25 GPA in the major requirements and a minimum 2.00 overall GPA are required.

Students must also satisfy the university Diversity Requirements.

*MATH 12001, which is a prerequisite for MATH 12002, should be bypassed by students with sufficient background.

BACHELOR OF SCIENCE DEGREE

VIII.

Industrial Technology

Industrial technology programs are closely related to the fields of electronic, industrial and manufacturing engineering and prepare students for employment in technical, scientific and managerial positions. Each of the industrial technology concentrations consists of a liberal arts base combined with appropriate studies in the natural sciences, technology and management.

The industrial technology graduate may be employed in various positions, including the following: manufacturing or electronics technologist, technical sales representative, engineering assistant, technical supervisor/manager, computer-aided design (CAD) specialist and entry-level engineer. Graduates may be involved in research and development (R&D) activities while working closely with engineering personnel.

Within the industrial technology major, students may choose either the electronics concentration or the manufacturing engineering technology concentration. Additionally, a "2+2" concentration is available for graduates of associate's degree programs.

Electronics Concentration

I.	Compo	osition
	ENG	10001, 10002, College English I, II6
		20002, Introduction to Technical Writing
II.	Mathe	matics, Logic and Foreign Languages
	CS	10061, Introduction to Computer Programming3
	MATH	12001, Algebra and Trigonometry4
		12002, Analytic Geometry and Calculus I5
		12003, Analytic Geometry and Calculus II5
		21001, Linear Algebra with Applications
III.	Humai	nities and Fine Arts
	COMN	15000, Theory and Practice of Oral Discourse
	Select	6 hours from the Humanities and Fine Arts LERs 6
IV.	Social	Sciences
	ECON	22060, Principles of Microeconomics
		22061, Principles of Macroeconomics
	Social	Science elective from LERs
V.	Basic	Sciences
	CHEM	10060, General Chemistry I4
		10062, General Chemistry I Lab1
	PHY	23101, 23102, General University Physics I, II10
VI.	US 10	001, University Orientation
VII.	Major	Requirements
		Technology Core:
	TECH	10001, Information Technology3
		13580, Engineering Graphics I
		20004, Electrical Circuits I
		Technology:
	TECH	23224, Electrical Circuits II
		23581, Computer Aided Engineering Graphics
		33220, Analog Electronics
		33222, Digital Design and Applications 3

		33223, Electronic Communication		3
		33225, Industrial Control Systems		3
		33580, Engineering Graphics for Electro	onics	3
		43026, Microprocessor Systems		3
		43220, Electrical Machinery		3
		43221, Control Systems and Robotics		3
		43800, Applied Engineering Technology	Seminar	2
VIII.	Busine	ess:		6
	M&IS	24056, Principles of Business Statistics		3
		24163, Principles of Management		3
IX.	Electiv	/es		16
	At leas	t 1 hour from technology courses.		
			TOTAL	126

Students should complete technology core sequence and all required lower-division math and science courses before registering for upper-division technology courses.

Minimum of 39 upper-division hours required.

Minimum 2.00 overall GPA required.

Minimum of 2.25 required in major and field of concentration GPAs.

American Assembly of Collegiate Schools of Business accreditation standards prohibit nonbusiness majors from taking more than 25 percent of their degree requirements in business courses. Therefore, no more than 30 semester credit hours may be counted toward stated degree requirements.

Manufacturing Engineering Technology Concentration I. II. 10061, Introduction to Computer Programming3 CS MATH 12001, Algebra and Trigonometry 4 12002, 12003, Analytic Geometry and Calculus I, II ... 10 III. IV.

	Plus 3	hours of Social Science from the LERs
۷.	Basic	Sciences
	CHEM	10050, Fundamentals of Chemistry3
	PHY	23101, 23102, General University Physics I, II 10
		32551, Applied Engineering Mechanics3
VI.	US 100	001, University Orientation1
VII.	Techno	blogy Core
	TECH	10001, Information Technology3
		13580, Engineering Graphics I
		20002, Materials and Processes3
		20004, Electrical Circuits I
VIII.	Techno	blogy
	TECH	23224, Electrical Circuits II
		23581, Computer-Aided Engineering Graphics
		31020, Automated Manufacturing
		31065, Cast Metals
		33033, Hydraulics/Pneumatics
		33363, Metallurgy and Material Science
		33111, Strength of Materials3
		43080, Industrial and Environmental Safety
		43220, Electrical Machinery3
		43550, Computer Aided Manufacturing3
		43580, Computer-Aided Machine Design3
		43700, Computer Integrated Manufacturing
		43800, Applied Engineering Technology Seminar2
IX.	Busine	9 ss:
	ACCT	23020, Introduction to Financial Accounting 3
	M&IS	24056, Principles of Business Statistics
		24163, Principles of Management3
Х.	Electiv	res
		Choose 10 hours from the following:
	M&IS	34060, Operations Management (3)
		34180, Human Resource Mgmt. (3)
		44063, Quality and Cost Control (3)
	TECH	31000, Cultural Dynamics of Technology (3)
		31016, Manufacturing Tech. (3)
		33056, Cooperative Education (1-6)
		33220, Analog Electronics (3)
		33222, Digital Design and Applications (3)
		33223, Elect. Communications (3)
		TOTAL 130

Students must complete technology core sequence and all required lower-division math and science courses before registering for upper-division technology courses.

Minimum of 39 upper-division hours required.

American Assembly of Collegiate Schools of Business accreditation standards prohibit nonbusiness majors from taking more than 25 percent of their degree requirements in business courses. Therefore, no more than 30 semester credit hours may be counted toward stated degree requirements.

"2+2" Concentration for Associate's Degree Graduates

The "2+2" concentration in industrial technology provides a course of study for associate's degree graduates who desire to complete a Bachelor of Science in Industrial Technology. It allows graduates to apply all or nearly all of the coursework completed in the associate's degree program toward the B.S. degree, broadens students' backgrounds and allows the students to gain additional technical and managerial depth. A unique feature of the Kent State University program is its flexibility, including 15 upper-division technical elective hours that the students select in consultation with a School of Technology adviser.

Industrial Technology "2+2"

I.	Composition
	ENG 10001, 10002, College English I, II6
	20002, Introduction to Technical Writing
II.	Mathematics, Logic and Foreign Languages
	MATH* 12001, Algebra and Trigonometry
	* 12002, Analytic Geometry and Calculus I
III.	Humanities and Fine Arts9
	COMM 15000, Theory and Practice of Oral Discourse
	Select 6 hours from Humanities and Fine Arts LERs
IV.	Social Sciences
	ECON 22060, Principles of Microeconomics
	22061, Principles of Macroeconomics
	Select 3 hours from Social Sciences LERs
V.	Basic Sciences
	PHY * 13001, 13002, General College Physics I, II
VI.	US 10001, University Orientation
VII.	Major Requirements:
	Courses accepted by the School of Technology as transfer credit.
VIII.	Technical Electives (Upper Division)**15
IX.	Business:
	Accounting, economics, finance, management and information
	systems. At least 12 hours must be upper-division.

School of Technology

Х.	General Electives	 •••	 	 • •	•••		 •	· ·			•	 	 .12	2
								тс)T	AL			129)

*Or equivalent.

**Technical electives must be chosen in consultation with a faculty adviser.

Minimum of 27 upper-division hours required (with associate's degree).

American Assembly of Collegiate Schools of Business accreditation standards prohibit nonbusiness majors from taking more than 25 percent of their degree requirements in business courses. Therefore, no more than 30 semester credit hours may be counted toward stated degree requirements.

Management Technology "2+2"

I.	Composition
	ENG 10001, 10002, College English I, II
	**** 20002, Introduction to Technical Writing
II.	Mathematics, Logic and Foreign Languages9
	MATH* 11011, College Algebra4
	Choose one from
	* 11022, Trigonometry (2)
	12001, Algebra and Trigonometry (4)
	Choose one from
	* 11012, Intuitive Calculus (3)
	12002, Analytic Geometry and Calculus I (5)
III.	Humanities and Fine Arts9
	COMM 15000, Theory and Practice of Oral Discourse
	Select 6 hours from Humanities and Fine Arts LERs
IV.	Social Sciences
	ECON 22060, Principles of Microeconomics
	22061, Principles of Macroeconomics
	PSYC 11762, General Psychology3
V.	Basic Sciences
	Select from PHY, CHEM, BSCI
VI.	US 10001, University Orientation1
VII.	Major Requirements
	ACTT 11000, Accounting I — Financial4
	BMRT 11000, Introduction to Business
	11009, Introduction to Management Technology3
	21000, Business Law and Ethics I

		21004, Introduction to Business Statistics
		21006, Human Resources Management
		21008, Case Studies in Management Technology3
		21009, Seminar in Management Technology
		21011, Fundamentals of Financial Management3
		21050, Fundamentals of Marketing Technology3
		21052, Professional Selling Techniques
VIII.	Techn	ical Requirements15
	TECH*	*20002, Materials and Processes
		31016, Manufacturing Technology
		31020, Automated Manufacturing
		33056, Cooperative Education —
		Professional Development
		43080, Industrial and Environmental Safety3
	Techno	blogy elective (upper division)
IX.	Busine	ess Requirements***
	ACCT	23021, Introduction to Managerial Accounting
	COMT	11000, Introduction to Computer Systems
	FIN	36053, Business Finance
	M&IS	34060, Operations Management
		44063, Quality and Cost Control
	MKTG	35025, Supply Chain Management
	Busine	ss elective (upper division)
	Recon	nmend: M&IS 34056, Intermediate Statistics
Х.	Gener	al Electives
		TOTAL 129

*May substitute MATH 11011 and 11022 for 12001; may substitute MATH 11012 for 12002.

**May substitute MERT 12004 for TECH 20002.

- **This is an associate's degree requirement and does not apply to this B.S. degree. It is however, a prerequisite to TECH 31016.
- **TECH 13580 should be taken before MERT 12004.

***Completion of all prerequisites required.

****May substitute ITAP 26638 for ENG 20002.

MINORS IN THE SCHOOL OF TECHNOLOGY

Technology Education Licensure

This minor is for students planning to become technology education teachers. Required technical content is found in the B.S. in technology major on Page 335.

	TOTAL 40
	49525, Inquiry into Professional Practice
	46031, Student Teaching9
	41052, Technology Education for Elementary School3
	of Technology Education
	41051, Foundation and Contemporary Theories
	41002, Organization in Technology Education
TECH	41001, Methods in Technology Education
SPED	23000, Intro. to Exceptionalities
	Students and Teachers
HED	42575, Health and Learning: Strategies for
	39525, Inquiry into Schooling
	29525, Inquiry into Teaching and Learning

Note: The Praxis II Examination Principles of Learning and Teaching (5-9 or 7-12) is required for licensure.

Electronic Technology

Prerequisite:

MATH*12001, Algebra and Trigonometry (4) Courses:

		TOTAL	18
	43026, Microprocessor Systems	3	
	33580, Engineering Graphics for Electron	ics	
	33222, Digital Designs and Applications		
	33220, Analog Electronics		
	23224, Electrical Circuits II		
TECH	20004, Electrical Circuits I		

*Or equivalent.

Flight Technology

		TOTAL	23
	35747, Commercial Pilot Flight III	2	
	35746, Commercial Pilot Theory	2	
	35647, Commercial Pilot Flight II	2	
	35645, Instrument Pilot Flight	2	
	35644, Instrument Flight Theory	3	
	25743, Commercial Pilot Flight I	2	
	25250, Elements of Aviation Weather	2	
	15741, Private Pilot Flight	3	
ГЕСН	15740, Elements of Flight Theory	5	

A	L		

Technology		
MATH**12001, Algebra and Trigonometry		. 4
TECH 10001, Information Technology		. 3
13580, Engineering Graphics I		. 3
20001, Energy/Power		. 3
20002, Materials and Processes		. 3
21021, Survey of Electricity and Electr	onics	. 4
23581, Computer-Aided Engineering G	Graphics	. 3
31000, Cultural Dynamics of Technolo	юду	. 3
Technology electives		. 2
	TOTAL	2

**If MATH 12001 has been taken previously, these hours must be completed as technology electives.

MINORS IN OTHER COLLEGES/SCHOOLS

In addition to the departmental minors, undergraduate students in the School of Technology can select from a wide range of minors offered by other colleges and schools at Kent State University.

Arts and Sciences

The following minors within the College of Arts and Sciences are available to all undergraduate students at Kent State University. Please see Pages 150-170 for program requirements.

African Studies

American Sign Language American Studies Ancient, Medieval and Renaissance Studies Anthropology Applied Conflict Management **Applied Mathematics** Asian Studies **Biological Sciences British Studies Business French Business German Business Russian Business Spanish** Cartography Chemistry Classics Climatology **Comparative Literature** Computer Science Economics English French

Geography Geology German German Studies Greek Health Care Ethics Hellenic Studies History Jewish Studies Justice Studies Latin Lesbian, Gay, Bisexual and Transgendered Studies Lithuanian Studies Mathematics North Atlantic Security Studies Pan-African Studies Paralegal Studies Philosophy Physics **Political Science** Pre-Law Psychology **Religion Studies Romanian Studies** Russian **Russian Studies** Sociology Spanish Urban Studies and Planning Women's Studies The Writing Minor

Business Administration

The following minors within the College of Business Administration are available to all undergraduate students at Kent State University. Please see Pages 189-194 for program requirements.

Accounting Business Computer Information Systems Economics Finance Human Resource Management International Business Management Marketing Military Studies

Communication and Information

The following minors within the College of Communication and Information are available to all undergraduate students at Kent State University. Please see Pages 204-205 for program requirements.

Advertising

Communication Studies Design Electronic Media Media Literacy Photo Illustration Public Relations Visual Journalism

Education

The following minors within the College of Education are available to all undergraduate students at Kent State University. Please see Page 264 for program requirements.

Community Health Education Human Sexuality

Fine and Professional Arts

The following minors within the College of Fine and Professional Arts are available to all undergraduate students at Kent State University. Please see Pages 276-278 for program requirements.

Art History Crafts Dance* Family, Food and Nutritional Studies Gerontology Hospitality Food Service Management Music* Studio Art Theatre

> *Auditions are required before acceptance into the dance or music minors.

School of Exercise, Leisure and Sport

The following minors within the School of Exercise, Leisure and Sport are available to all undergraduate students at Kent State University. Please see Pages 299-301 for program requirements.

Athletic Coaching—Non-PE Majors Leisure Studies Sport Management for Non-Majors Sports Medicine



THE REGIONAL CAMPUSES Advising Offices are Located at the Individual Campuses.

See the next two pages for the campus nearest you. www.rc.kent.edu

349

THE REGIONAL CAMPUS NETWORK

The Regional Campuses are a network of seven community-oriented institutions within the university. Three of them, the Ashtabula, East Liverpool and Salem campuses, are named for the cities where they are located. The remaining four, Geauga, Stark, Trumbull and Tuscarawas campuses, are named for their counties and are located near the cities of Burton, Canton, Warren and New Philadelphia, respectively.

All of the Regional Campuses are accredited by the The Higher Learning Commission and a member of the North Central Association. Some associate's degree programs also have earned specific accreditation. The nursing program is accredited by the National League for Nursing, and the electrical/electronics and the mechanical engineering technology programs at the Tuscarawas Campus are accredited by the Technology Accreditation Commission of the Accreditation Board of Engineering and Technology (TAC/ABET). Salem's radiologic technology program is accredited by the Committee on Allied Health Education and Accreditation. The American Physical Therapy Association has accredited East Liverpool's program. East Liverpool's occupational therapy assisting program is accredited by the American Occupational Therapy Association Inc. in collaboration with the Committee on Allied Health Education and Accreditation and the American Medical Association.

MISSION

The mission of the Regional Campuses is to extend to the residents of Northeast Ohio access to the quality higher education programs and services of Kent State University. The campuses share the liberal education goals of the university and strive to meet the needs of society with technical programs that help prepare a paraprofessional work force. The campuses are an entry point to higher education for high school graduates, and they provide access for persons who see the campus as a way to build a secure and better life for themselves. The campuses provide coursework at the freshman and sophomore levels in technical and baccalaureate areas, in the university's 36-hour LERs, associate's degree programs, continuing study and basic skills classes, as well as selected junior, senior and graduate courses. For students, the campuses are close to home and affordable, and many enroll on a part-time basis. The campuses provide the breadth of programs and services necessary for a successful college experience, have the distinctive feature of being part of the larger university and provide their communities with public service activities of an educational nature for personal growth and development.

THE CAMPUSES

The Ashtabula Campus

3325 W. 13th St., Ashtabula, OH 44004, (440) 964-3322, (440) 964-4269 (FAX), www.ashtabula.kent.edu. The Ashtabula Campus occupies an 80-acre site on the shores of Lake Erie. It is comprised of three buildings: Main Hall, a large three-winged structure radiating from an open courtyard; a library; and a technology and art building. The site also features an outdoor performing arts platform

located in a large grove, baseball diamonds and tennis courts. In addition to offering a variety of cultural, social and student activities, the campus also offers academic support services, continuing studies, developmental education, certificate programs, the first two years of most baccalaureate programs, and two-year associate's degrees in business, engineering, human services, nursing, physical therapy assisting and computer technologies.

The East Liverpool Campus

400 E. 4th St., East Liverpool, OH 43920, (330) 385-3805, (330) 385-6348 (FAX), www.kenteliv.kent.edu. Overlooking the Ohio River from its perch at the edge of historic East Liverpool, the campus is a hub of activity from early morning until late evening as students come together for exceptionally high-quality instruction. Classes are conveniently scheduled to accommodate today's hectic lifestyles, allowing students with job and family responsibilities to enjoy the advantages of higher education.

Kent State East Liverpool prides itself on its small class sizes, outstanding faculty and a sense of community. The campus is composed of three buildings, including the recently renovated Mary Patterson building. This \$4 million project has enabled the campus to offer the most up-to-date technology in distance learning, expanding the campus' ability to offer a diversity of courses.

The choices at Kent State East Liverpool are limitless. In addition to completing general studies courses that help students work toward almost 170 baccalaureate programs universitywide, students can choose to complete a wide range of associate's degree programs including accounting, business, computer technology, legal assisting, nursing, occupational therapy assisting, justice studies and physical therapy assisting. Students can complete coursework leading to selected bachelor degrees in areas such as technology, business management, justice studies and integrated health studies. Graduate-level coursework leading to master's degrees in technology and education is also offered.

The Geauga Campus

14111 Claridon-Troy Road., Burton Twp., OH 44021, (440) 834-4187, (440) 951-1447 (Cleveland), (440) 834-8846 (FAX), (440) 834-4486 (TDD), www.geauga.kent.edu. The Geauga Campus, which lies at the heart of Ohio's maple syrup country, provides easy access to urban, suburban and rural areas. In addition to offering several cultural, social and student activities, the campus also offers training for area businesses and industries, academic support services, developmental education, certificate programs, the first two years of baccalaureate programs, and programs in business management, computer technologies, horticulture and technical studies.

The Salem Campus

2491 SR 45 South, Salem, OH 44460, (330) 332-0361, (330) 332-9256 (FAX), www.salem.kent.edu, e-mail ask-us@salem.kent.edu. The Salem Campus offers the first two years of study in most Kent State University baccalaureate programs, as well as selected upperdivision and graduate courses. Located on a 96-acre site just two miles south of the city, the campus features a lake for both fun and educational activities. The grounds include an arboretum-a 25acre mixed hardwood forest used by students for studies and recreation. A nature trail winds through the campus, attracting both bird watchers and runners. Students may use the full-sized gym, weight/fitness room, racquetball courts and outdoor tennis courts to stay fit. The student activities center features Ping-Pong, pool tables, big-screen TV and arcade games for relaxation between classes. In addition to offering a variety of cultural, social and student activities, the campus offers an honors program, continuing studies, liberal education courses, academic support services, developmental education and associate's degree programs in business, engineering, education, horticulture, human services, radiologic technology and computer technologies. Students also can complete four bachelor's and two master's degree programs on campus.

The Stark Campus

6000 Frank Ave. NW, Canton, OH 44720, (330) 535-3377 (Akron) or (330) 499-9600 (Canton), (330) 494-6121 (FAX), www.stark.kent.edu. Kent State Stark offers the first two years of study in most Kent State University baccalaureate programs, as well as selected upper-division and graduate courses. Located on a 200-acre site in rolling terrain just south of the Akron-Canton Regional Airport, the Stark Campus is the largest of Kent State's Regional Campuses. The campus maintains arrangements with numerous community, cultural and business organizations to offer a wide range of programs and services to the local area. In addition to offering a variety of cultural, social and student activities, the campus also offers corporate and community services, management and small business development expertise, developmental education and academic support services.

The Trumbull Campus

4314 Mahoning Ave. NW, Warren, OH 44483, (330) 847-0571 (Warren), (330) 847-6172 (FAX), www.trumbull.kent.edu. Kent State Trumbull is located just north of the Route 5 bypass on State Route 45. Trumbull Campus students have more than 170 major career fields to explore. Offering the first two years of baccalaureate degree programs, the campus also awards associate's degrees in 13 areas of study, selected graduate courses, developmental education courses, a varied continuing studies program and a strong liberal arts core. Campus facilities include a theater, tennis courts and a one-mile fitness trail. The campus also offers a variety of social and cultural activities for area residents and a wide variety of student activities, academic support services and programs for business and industry.

The Tuscarawas Campus

330 University Drive NE, New Philadelphia, OH 44663, (330) 339-3391, (330) 339-3321 (FAX), www.tusc.kent.edu. The Tuscarawas Campus occupies a site that is within a few minutes of a number of important historical areas, including the Ohio Outdoor Drama, which performs "Trumpet in the Land" during the summer; Schoenbrunn Village, Ohio's first European settlement; the airport where John Glenn, who was America's first man into orbit, took his first flying lessons; and the Warther Museum, famous for its collection of carvings. In addition to a variety of cultural, social and student activities, the campus offers continuing studies, academic support services, developmental education, certificate programs, the first two years of baccalaureate programs, and programs in business, computer, engineering technologies, environmental technology and nursing.

SCHOOL OF TECHNOLOGY

Kent State University's School of Technology, Van Deusen Hall, Kent, OH, (330) 672-2892, www.tech.kent.edu. As part of the Regional Campus network, the School of Technology offers technology-based programs that will provide students with the skills needed to compete in today's job market. With more than 25 programs offered at the certificate, associate's, bachelor's and master's degree levels throughout Kent State's eight-campus network, a talented faculty and flexible class schedules that include evening, weekend, distance learning and Web-based classes, the School of Technology has a program to match your needs and interests. *(The undergraduate programs are described under School of Technology.*)

On the Kent Campus, the School of Technology offers four-year programs in aeronautics, industrial technology, and technology. At Kent State's seven Regional Campuses, the school offers the following two-year degrees; *Associate of Applied Business, Associate of Applied Science* and the *Associate of Technical Studies*. Programs in these areas include technology, computer technology, business technology, industrial technology, engineering technology and environmental technology. Many of the credits earned in the school's associate's degrees can be applied toward the baccalaureate completion program for a B.S. in technology or industrial technology.

ADMISSION

Students interested in attending a Regional Campus may obtain admission forms from any of the campuses. Admission is open to anyone with a high school diploma or its equivalent. Part-time early admission opportunities are available for qualified high school students in consultation with an adviser. In programs with special admission requirements, admission decisions and judgments, which will be made by the director of the program following normal faculty consultative procedures, take into account factors such as life experience, level of motivation and concern for underrepresented groups in the program, as well as indicators such as GPA or ACT score.

Each Regional Campus has staff members available to discuss admissions, financial aid opportunities and programs with prospective students.

Registration dates, times, procedures and access methods are similar to those of the Kent Campus. Registration information at a particular campus can be obtained from that campus.

Because the seven Regional Campuses and the Kent Campus comprise one university system, access and mobility among these campuses is encouraged and facilitated. Even so, there are some differences between the Kent Campus and the Regional Campuses in freshman and transfer admission requirements.

KENT CAMPUS REFERRALS

Freshman admission eligibility at the Kent Campus is based upon an applicant's cumulative high school GPA and, in some cases, standardized test scores and the college preparatory curriculum. Students not meeting the freshman admission criteria for the Kent Campus who wish to enter the Kent State University system must enroll for at least one semester at a Regional Campus. Enrollment at the Regional Campuses permits students to take advantage of smaller class sizes, more individualized advising services and a wider range of developmental programs.

For the deferred freshman or transfer student who enrolls at a Regional Campus to obtain the best possible foundation for academic success, it is recommended that the student complete the following minimum academic achievements before enrolling at the Kent Campus:

- Successfully complete any developmental coursework as prescribed by an academic adviser.
- 2. Successfully complete 12 semester hours of coursework.
- 3. Achieve a minimum cumulative GPA of 2.00.

Students are strongly encouraged to work closely with their academic adviser in planning for the transition to the Kent Campus.

STUDENT SERVICES AND FINANCIAL AID

Each Regional Campus provides a number of student services. One of the most important services is providing information about financial aid and scholarships. For students who qualify, a number of financial aid opportunities are available, including the Federal Perkins Loan, the Ohio Instructional Grant Program, the Federal Pell Grant Program and other special aid programs. Financial help may also be available through the Federal College Work-Study Program or through other part-time job opportunities. Local employers often seek part-time help through Regional Campus offices.

While each campus has scholarship funds available, the amount and number of scholarships and the requirements for them vary considerably. All of the campuses have funds available for shortterm loans. Because of the variety in number and character of these programs, it is suggested that interested students contact the financial aid adviser of the campus they wish to attend.

Other student services at the Regional Campuses include, but are not limited to, preadmission counseling, academic advising, child care and career counseling.

ACADEMIC SUPPORT SERVICES

An important feature of the Regional Campuses is a commitment to help students become successful. Many students enter directly from high school, while others combine full-time jobs and families with classwork. Success in college depends largely upon skills in reading, studying, mathematics and composition.

Basic Skills Assessment: Free testing is available and is required of all students to assess learning skills. This information is used by students and advisers to determine course placement. If testing shows the need for additional preparation in reading, studying, mathematics or composition, support courses are available to meet these needs and will be required.

Academic Support Courses:

MATH 10004, Developmental Mathematics, 4 credit hours. This course focuses on a review of arithmetic and an introduction to algebra. It covers real numbers, integers, equations and decimals. The hours are not counted toward graduation. Prerequisite: assessment testing or permission.

ENG 10000, Introduction to College English, 3 credit hours. This course examines the structure of the sentence and the paragraph, as well as grammar and its mechanics. Prerequisite: test score.

MATH 10005, Introduction to College Math, 3 credit hours. The topics included in this course are: number systems, exponents, polynomials, the Cartesian coordinate system, linear and quadratic

equations and inequalities. Prerequisite: appropriate placement test score or grade of C or better in MATH 10004; no previous mathematics courses.

US 10003, Reading Strategies for College Success, 3 credit hours. Emphasis in this course is placed on improving reading comprehension. Prerequisite: assessment testing or permission.

US 10006, Study Strategies for College Success, 3 credit hours. This course assists students to develop the reading skills necessary for successful completion of college coursework. Prerequisite: assessment testing or permission.

College credit is awarded for these courses; however, their application toward meeting degree requirements varies by program.

Support Services: These services include peer tutors, who are available for certain courses, and special assistance in writing, reading and mathematics. Also available are skill development centers, learning centers and workshops in writing.

University Orientation: US 10001 (University Orientation) is required of all freshmen and transfer students entering the university with 24 semester hours or less. It is designed to help make the transition to college; to familiarize individuals with campus life, services and expectations; and to suggest techniques that can improve student success.

Advising

Regional Campuses consider advising to be an essential component in student success. Professional staff provide general advising, while faculty have primary responsibility for major advising.

Cost

Because the university is state-supported, fees are adjusted to provide quality education at the lowest possible cost. One important advantage to students attending a Regional Campus is that they can live at home, thus saving room and board expenses.

STUDENT DISABILITY SERVICES

The Regional Campuses of Kent State University are committed to providing equal access to students with disabilities. Each campus has a student disability services coordinator who works with students to identify appropriate academic accommodations and support services to foster success at the university. Services for students with disabilities are determined by appropriate educational, medical and/or psychological documentation provided by the student. After documentation is reviewed and the disability is verified, students receive a letter of accommodations to present to instructors, and instructors then will work with students to meet their individual needs in the classroom. If students are requesting accommodations, it is suggested that they make contact with the student disability services coordinator on the campus they plan to attend at least two months prior to enrollment so that accommodations can be in order at the beginning of the semester. Contact the student disability services coordinator for more information.

THE ASSOCIATE'S DEGREE

Associate's degrees are degrees awarded for the successful completion of 61 or more semester hours of coursework. They are designed to fulfill two major purposes: to permit students to complete the freshman and sophomore years of a baccalaureate program; or to prepare them for immediate employment in a technology field.

While associate's degrees are awarded after the successful completion of at least 61 semester hours, it should be noted that most programs actually require additional hours to complete. Students who are studying part time should expect to take more than two years to complete their programs.

Baccalaureate Study on Regional Campuses

Each Regional Campus offers programs designed to complete the freshman and sophomore years of most of the baccalaureate degrees offered by the university. The intention of such programs is to provide students interested in eventually obtaining a four-year degree the opportunity of beginning it while remaining at home. It is expected that such students eventually will transition to the Kent Campus or transfer to another baccalaureate degree-granting institution to complete the degree.

Completion of the freshman and sophomore years of a baccalaureate degree program leads to the award of the Associate of Arts or Associate of Science degrees.

Associate of Arts: This degree is awarded to students who successfully complete a minimum of 61 semester hours toward the Bachelor of Arts, the Bachelor of Fine Arts, the Bachelor of Business Administration, the Bachelor of General Studies or the Bachelor of Music degrees.

Associate of Science: This degree is awarded to students who successfully complete a minimum of 61 semester hours toward a Bachelor of Science degree.

Baccalaureate Degree Completion Programs

Several baccalaureate degree programs at Kent State University often can be completed with approximately two years of additional full-time study after completion of an associate's degree in the technologies at Regional Campuses. *Some course selections lead*- ing to associate's degrees are more applicable than others as components of baccalaureate degrees, and exact requirements for additional study vary. Students interested in baccalaureate degree completion programs should see an adviser at the earliest possible date.

Liberal Education Requirements

Candidates for the Associate of Arts and the Associate of Science degrees must fulfill the LERs. Regional Campus students who intend to earn a bachelor's degree at Kent also will be expected to fulfill these requirements. (See Pages 77-80 of this *Catalog* for specific information about the LERs.)

Students in Associate of Applied Science and Associate of Applied Business degree programs are expected to choose their general studies courses from the Liberal Education Requirements list. *All exceptions must be approved by the students' academic adviser.* The availability of specific LER courses varies by campus.

Technical Programs

The purpose of associate's degree programs in technical areas is to prepare graduates for immediate employment. To accomplish this, the following associate's degrees are offered:

Associate of Applied Business: This degree is awarded to students who successfully complete prescribed coursework in any of the following business technology programs: accounting technology, banking and finance technology, business management technology, computer technology or information technology for administrative professionals.

Associate of Applied Science: This degree is awarded to students who successfully complete prescribed coursework in any of the following environmental, health or engineering technologies: early childhood education technology, electrical/electronic engineering technology, engineering of information technology, environmental technology, environmental management technology, high technology manufacturing, horticulture technology, human services technology, laboratory technology, legal assisting technology, manufacturing engineering technology, mechanical (integrated manufacturing) engineering technology, nursing, occupational therapy assisting technology, physical therapy assisting technology, plastics technology, radiologic technology or systems (industrial) engineering technology.

Associate of Technical Study Degree-Category A: This degree requires a minimum of 65 hours selected in consultation with an academic adviser from existing courses at that campus. The program permits students to develop a curriculum based on specific career objectives that are not served by existing degree programs. Associate of Technical Study Degree-Category B: This degree provides associate's degree-level completion based on a technical certificate or other formal technical training program acquired outside Kent State University. (See ATS—*Industrial Trades Technology*, Page 374.)

Options in Technical Programs

Some business and engineering technology programs have different options from which students can choose. While options provide students with opportunities for focused study, not all options possible within a program are offered at all campuses. Students should check with an adviser to see what program options are available at the campus they are attending.

Certificate Programs

The Regional Campus system awards approved certificates to students who successfully complete a course of study designed to meet a specific need. These programs consist of no less than 15 credit hours and no more than 30.

Students wishing to participate in certificate programs must meet the standards set forth in the University Admissions Policy, except where a program has been designed for a group with unique needs, such as a contract training group.

Students already enrolled at Kent State must declare their intent to pursue a certificate before completing 50 percent of the courses required. Courses completed pass-fail or Credit-By-Exam will not count toward completion of the certificate requirements. If a student has already completed a program requirement by pass-fail or Credit-By-Exam, an alternative requirement will be designated.

To successfully earn a certificate, students must achieve a 2.50 cumulative GPA in the courses required for the following programs: Database Administrator, Legal Nurse Consulting/Nurse Paralegal, Solutions Developer and Systems Engineer. All other certificates require a minimum cumulative GPA of 2.00 in the courses required for the programs.

Opportunities for Study Beyond the Associate's Degree While it is understood that Associate of Arts and Associate of Science degree programs eventually lead students into a baccalaureate program, opportunities for continued study by students who complete an associate's degree in a technical field are also available.

Many credits earned in a technical associate's degree program are applicable to baccalaureate degrees both at Kent State and at other colleges and universities. Which credits apply depends upon the associate's degree earned and the baccalaureate degree toward which students wish to work. The baccalaureate completion program permits students who hold an associate's degree in an appropriate field to complete the Bachelor of Science in approximately two years of additional study. For additional information, please consult Page 352 of this *Catalog*.

BACHELOR OF SCIENCE

The College of Fine and Professional Arts provides a Bachelor of Science in Radiologic and Imaging Sciences at the Salem Campus. The degree is designed for students with interest in pursuing studies related to medical imaging in four concentrations: computed tomography (CT), diagnostic medical sonography (DMS), magnetic resonance imaging (MRI) or nuclear medicine technology (NMT). The four pathways to pursue the degree include:

- Freshman entry for DMS and NMT for the Bachelor of Science
- Baccalaureate degree completion from the Associate of Science degree for DMS and NMT
- Baccalaureate degree completion from the Associate of Applied Science in Radiologic Technology for CT, DMS, MRI and NMT
- Baccalaureate degree completion from the Associate of Technical Studies degree for CT, DMS, MRI and NMT for those registered technologists who graduated from a hospital-based medical imaging program

The Salem Campus offers an Associate of Applied Science in Radiologic Technology. Upon completion, graduates of this associate degree must pass a national certification exam to become a registered radiologic technologist. Graduates of the program are then able to pursue the Bachelor of Science in Radiologic and Imaging Sciences in order to specialize in one of the four concentrations. The degree allows students in radiologic technology opportunities to broaden their knowledge and expertise in an advanced medical imaging modality. It also broadens the employment opportunities for graduates.

The CT and MRI concentrations are part of the baccalaureate completion program of the Associate of Applied Science in Radiologic Technology or the Associate of Technical Studies degree for those registered radiologic technologists who graduated from a hospitalbased program in radiologic technology.

The nuclear medicine and the diagnostic medical sonography concentrations can be a freshman entry degree; a baccalaureate completion degree from the Associate of Applied Science in Radiologic Technology, Diagnostic Medical Sonography or Nuclear Medicine Technology; a baccalaureate completion degree from the Associate of Technical Studies in Medical Imaging; or a baccalaureate completion degree from an Associate of Science degree. The Associate of Science and the freshman entry have prerequisite coursework in radiologic technology prior to entering diagnostic medical sonography or nuclear medicine. Students must seek advisement from an adviser in the radiologic and imaging sciences program at the Salem Campus.

Graduation Requirements

To receive a Bachelor of Science in Radiologic and Imaging Sciences, a student must satisfy the 36-hour minimum requirements stipulated in the Liberal Education Requirements as indicated in this *Catalog.* Students must complete coursework for the Diversity Requirements. Students must complete a minimum of 39 upperdivision (junior and senior level) courses. The cumulative grade point average must be at least a 2.00 for all coursework taken at Kent State University. Students must have a minimum of 2.75 in the radiologic and imaging sciences core courses. Students must complete all academic and clinical competencies in their core concentration.

Writing-Intensive Course Requirements

All students at Kent State University must complete a writing-intensive course in their major. For radiologic and imaging sciences majors, IHS 44091, Professional Seminar in Integrated Health Studies, is the course designated to meet the Writing-Intensive Course Requirement.

Radiologic and Imaging Sciences*

This program provides a liberal education within the medical imaging culture for students contemplating careers in radiologic or medical imaging fields. Courses in the major provide breadth of technical experience, while electives may be utilized to increase competencies in other areas.

*Pending Ohio Board of Regents Approval.

I.	Composition
	ENG 10001, 10002, College English I, II
II.	Mathematics, Logic, Foreign Languages
	MATH 11011, College Algebra4
	Select 2 hours from the Liberal Education Requirements2
III.	Humanities and Fine Arts
	Select 9 hours from the Liberal Education Requirements9
IV.	Social Sciences
IV.	Social Sciences .9 PSYC 11762, General Psychology .3
IV.	Social Sciences .9 PSYC 11762, General Psychology .3 Select 6 hours from the Liberal Education Requirements .6
IV. V.	Social Sciences .9 PSYC 11762, General Psychology .3 Select 6 hours from the Liberal Education Requirements .6 Basic Sciences .6-11
IV. V.	Social Sciences
IV. V.	Social Sciences

For Diagnostic Medical Sonography Associate of Science or Freshman Entry:

BSCI	20020, Biological Structure and Function5	
PHY	13001, General College Physics I	
PHY	13021, General College Physics I Lab0	
For Nu	clear Medicine Associate of Science or Freshman Entry:	
BSCI	20020, Biological Structure and Function5	
CHEM	10050, Fundamentals of Chemistry	
	10052, Introduction to Organic Chemistry2	
	10053, Inorganic and Organic Laboratory1	
US 100	001, University Orientation	1

VII.	Technology Requirements from AAS in RADT for 2+2 Options	53
------	--	----

VIII. Major Requirements (choose one concentration)

VI.

Computed Tomography Concentration (2+2)

		TOTAL		129
Upper	division electives	· · <u>· · · · · · · · · · · · · · · · · </u>	15	
	Studies		3	
IHS	44091, Professional Seminar in Integrate	ed Health		
	44098, Research in Medical Imaging		3	
	44083, Pathophysiology for Medical ima	iging	3	
	44025, CT Clinical Education		3	
	44024, Physical Principles of CT		3	
	44022, CT Procedures		3	
	44021, Patient Management in CT		3	
RIS	34083, Sectional Anatomy in Medical Im	aging	3	

Magnetic Resonance Imaging Concentration (2+2)

		TOTAL	129
Upper-	division electives		
	Studies		
IHS	44091, Professional Seminar in Integrate	d Health	
	44098, Research in Medical Imaging		
	44083, Pathophysiology for Medical Imag	ging3	
	44035, MRI Clinical Education		
	44034, MR Equipment and Image Acquis	ition	
	44032, MRI Procedures		
	44031, Patient Management in MRI		
RIS	34083, Sectional Anatomy in Medical Ima	aging3	

Diagnostic Medical Sonography Concentration

RIS	34042, Abdominal Sonography I
	34044, Ultrasound Physics and Instrumentation $\ldots \ldots .3$
	34045, Ultrasound Clinical Education I2
	34052, Abdominal Sonography II2

34055, Ultrasound Clinical Education II
34062, Obstetric-Gynecology Sonography I
34065, Ultrasound Clinical Education III
34082, Small Parts Sonography1
34083, Sectional Anatomy in Medical Imaging
44098, Research in Medical Imaging
44072, Obstetric-Gynecologic Sonography II
44074, Vascular Sonography
44075, Ultrasound Clinical Education IV
44083, Pathophysiology for Medical Imaging
44084, Ultrasound Image Evaluation
44085, Ultrasound Clinical Education V
Electives for freshmen entry B.S. and A.S
Related courses for freshman entry and AS:
COMT 11000, Intro. to Computer Systems
HED 14020, Medical Terminology
RADT 14002, Intro. to Patient Care
Total hours for freshmen entry B.S., A.S. and A.T.S. for B.S. in R.I.S.
TOTAL 121

Total hours for A.A.S. in RADT +2 B.S. in RIS

TOTAL 129

Nuclear Medicine Technology Concentration

TOTAL 1
Total hours for freshmen entry B.S., A.S. and A.T.S. for B.S. in RIS
HED 14020, Medical Terminology2
COMT 11000, Intro. to Computer Systems
Related courses for freshman entry and AS:
Electives for freshmen entry B.S. and A.S
44098, Research in Medical Imaging3
44020, Nuclear Medicine Clinical Education IV3
44017, Nuclear Medicine Radiation Safety3
44016, Nuclear Medicine Procedures III
44015, Nuclear Medicine Clinical Education III3
44014, Nuclear Medicine Physics & Instrumentation II2
44012, Nuclear Medicine Procedures II
44011, Nuclear Medicine Radiopharmacy3
44010, Nuclear Medicine Clinical Education II2
44006, Nuclear Medicine Physics & Instrumentation I4
44005, Nuclear Medicine Clinical Education I2
44002, Nuclear Medicine Procedures I
RIS 44001, Patient Management in Nuclear Medicine2
IHS 44091, Professional Sem. in Integrated Health Studies3

121

Total hours for A.A.S. in RADT +2 B.S. in RIS

TOTAL

ASSOCIATE'S DEGREE REQUIREMENTS

General Academic Requirements

In addition to completing a minimum of 61 semester hours of approved coursework and meeting all program requirements, candidates for an associate's degree, entering the university in the Fall Semester 1980 or later with freshman standing, also must complete University Orientation (US 10001), a 1-hour course.

To graduate, students must attain a minimum cumulative GPA of 2.00 for all coursework taken at Kent State University. Candidates for the Associate of Applied Business and Associate of Applied Science must attain a 2.00 cumulative GPA in the technical courses.

If students are required to take additional coursework to raise the GPA in the technical core to 2.00, the course(s) will be selected in consultation with the program adviser and approved prior to registration. It is required that such coursework be in the technical area. Candidates for the Applied Science in Nursing degree must attain a grade of at least C in each nursing, biology, chemistry and nutrition course.

Program Requirements

Before or upon completion of 32 semester hours, associate's degree students are required to contact the student services office at their campuses to obtain an official program requirement sheet. This sheet should be completed in consultation with the students' adviser and a copy returned to the student services office.

Requests for adjustments in program requirements must be approved prior to enrolling in a course that is not in the prescribed curriculum. Requests for adjustments will not be accepted during the semester in which the students expect to graduate, except when a course has been canceled at the beginning of that semester or upon determination of the campus dean that there have been mitigating circumstances.

Residency Requirements

Students seeking an associate's degree must complete either the first 45 or final 15 hours of their programs at Kent State University to fulfill their residency requirement. This means that those hours must be completed either at the Kent Campus, at the Regional Campuses, or some combination of both. Credit earned by means of transfer or correspondence courses do not count toward the hours required to fulfill residency.

Requirements for Additional Degrees

To pursue concurrent associate's degrees, students must be in good academic standing and enrolled officially for a first, or primary, associate's degree. Students may qualify to receive a concurrent associate's degree by successfully completing all the requirements for both and a minimum of 15 credit hours beyond those required for the primary degree. To pursue a concurrent degree, students must: (1) obtain advising from a faculty member in each degree program, (2) complete a Program Requirement Sheet for each program, and (3) receive approval from the Office of Vice Provost for Regional Campuses. Only after approval is granted may students enroll for a second degree. Students must enroll for both degrees in time to meet graduation application deadlines for the semester in which they expect to receive the degrees.

Students who hold an associate's, baccalaureate or graduate degree and wish to pursue an associate's degree may do so by successfully completing all program and residency requirements, in addition to a minimum of 16 semester hours.

Because of the similarity in program requirements, the Associate of Arts and the Associate of Science degrees may not be earned concurrently; nor may either be awarded as an additional degree, when one or the other has been previously conferred.

Pass-Fail, Advanced Placement and Credit Testing

Only pass-fail credits earned in experimental courses, CLEP, Credit-By-Examination and credit-bearing advanced placement may be applied toward degree requirements in the Associate of Applied Business and Associate of Applied Science programs. The restrictions on pass-fail options for students seeking an Associate of Arts or Associate of Science degree are presented in another section of this *Catalog*.

The university policy on credit earned through advanced placement, CLEP and Credit-By-Examination is also presented in another section of this *Catalog*. Briefly, however, associate's degree students can earn no more than 15 semester hours through a combination of advanced placement, CLEP and Credit-By-Examination toward their degrees. Noncredit-bearing advanced placement waives a requirement or prerequisite but not credit hours necessary for the degree.

Transient Work at Another University

Students who wish to take coursework at another accredited institution of higher education must be in good standing and receive the prior approval of the campus dean if they intend to apply this work toward an associate's degree. Only coursework earning a grade of C or better will be considered for transfer to Kent State University. Neither the GPA nor the grades earned are used in computing the Kent State GPA.

Correspondence Course Credit

Kent State does not offer correspondence courses. It will accept up to 6 semester hours of correspondence coursework from an accredited institution toward an associate's degree; however, each course must carry a grade of at least C and be applicable to the students' associate's degree program. Correspondence credit does not count toward the residency requirement.

Graduation

Associate's degrees are conferred at each Regional Campus at the end of the semester in which all requirements are successfully completed.

Application for Graduation

Graduation applications, information and deadline dates may be obtained from Student Services at each Regional Campus. Completed application forms are to be returned by the deadline to that office. If students fail to carry out the proper application procedures, the degree will not be granted until the next graduation date.

Graduation with Distinction

Candidates for associate's degrees who demonstrate high levels of scholarship through their coursework will graduate with distinction. "With Distinction" is awarded when students achieve a GPA of 3.50 or better for all undergraduate coursework at Kent State University. In order for students to be considered for graduation "With Distinction" and have it inscribed on their diploma, a minimum of 32 credit hours must be completed at Kent State University. The students' GPA (which should be unadjusted by the application of the Academic Forgiveness Policy, Course Repeat Policy or Freshman Rule for Recalculation of Grade Point Average), will be used in determining "With Distinction."

ASSOCIATE'S DEGREES OFFERED AT EACH CAMPUS

The following is a list of associate's degrees offered at each Regional Campus.

ASHTABULA CAMPUS

Associate of Arts Justice Studies Associate of Science Associate of Applied Business Accounting Technology Business Management Technology Computer Technology Information Technology for Administrative Professionals Associate of Applied Science Early Childhood Education Technology Electrical/Electronic Engineering Technology Environmental Technology

Human Services Technology Mechanical Engineering Technology (Integrated Manufacturing) Nursing Physical Therapy Assisting Technology Associate of Technical Study—Category A EAST LIVERPOOL CAMPUS Associate of Arts Justice Studies Associate of Science Associate of Applied Business Accounting Technology **Business Management Technology** Computer Technology Associate of Applied Science Legal Assisting Technology Nursing Occupational Therapy Assisting Technology Physical Therapy Assisting Technology Associate of Technical Study—Category A **GEAUGA CAMPUS** Associate of Arts Associate of Science Associate of Applied Business Accounting Technology (most coursework) Business Management Technology (most coursework) Computer Technology Associate of Applied Science Horticulture Technology Associate of Technical Study—Category A Associate of Technical Study—Category B Industrial Trades Technology SALEM CAMPUS Associate of Arts Associate of Science Associate of Applied Business Accounting Technology (most coursework) **Business Management Technology** Computer Technology Information Technology for Administrative Professionals Associate of Applied Science Early Childhood Education Technology Environmental Management Technology Horticulture Technology Human Services Technology Manufacturing Engineering Technology Radiologic Technology Associate of Technical Study—Category A Associate of Technical Study—Category B Diagnostic Medical Sonography

Nuclear Medicine Technology Radiologic Technology Radiation Therapy Technology Radiology Department Management STARK CAMPUS Associate of Arts Justice Studies Associate of Science **TRUMBULL CAMPUS** Associate of Arts Justice Studies Associate of Science Associate of Applied Business Accounting Technology Banking and Finance Technology **Business Management Technology Computer Technology** Information Technology for Administrative Professionals Associate of Applied Science Electrical/Electronic Engineering Technology Environmental Technology High Technology Manufacturing Technology Laboratory Technology Legal Assisting Technology Mechanical Engineering Technology (Integrated Manufacturing) Plastics Technology Systems (Industrial) Engineering Technology Associate of Technical Study—Category A Associate of Technical Study—Category B Industrial Trades Technology **TUSCARAWAS CAMPUS** Associate of Arts Justice Studies Associate of Science Associate of Applied Business Accounting Technology Business Management Technology **Computer Technology** Information Technology for Administrative Professionals Associate of Applied Science Computer Design and Animation Engineering Technology Early Childhood Education Technology Electrical/Electronic Engineering Technology Engineering of Information Technology **Environmental Technology** Mechanical Engineering Technology (Integrated Manufacturing) Nursing Plastics Technology

Systems (Industrial) Engineering Technology Associate of Technical Study—Category A

ASSOCIATE'S DEGREE CURRICULA

The following curricula list requirements for each associate's degree program offered in the Regional Campuses.

Descriptions of courses for programs offered *only* at the Regional Campuses are marked with an asterisk (*) in the Course Descriptions section of this *Catalog*.

THE ASSOCIATE OF ARTS AND ASSOCIATE OF SCIENCE DEGREES

The Associate of Arts and Associate of Science degrees may be used for several purposes: (1) they may serve as freshman- and sophomore-year programs for students who are planning to complete a bachelor's degree program; (2) they may serve as degrees unto themselves for students who want to obtain a general education by sampling a variety of different subject areas; (3) they may advance students' careers or provide job retraining; and (4) they provide opportunities for intellectual growth and personal satisfaction.

Because of the general nature of the programs, students may achieve emphasis in areas that will meet specific educational needs by taking a concentration of six courses in a particular field of study. *However, students should consult with their advisers in the selection of their courses prior to the beginning of each semester.*

The following will meet the minimum requirements for each degree:

	TOTAL	61
University Orientation (US 10001)		
Electives		
Basic Sciences		
Social Sciences		
Humanities and Fine Arts	9	
Mathematics, Logic and Foreign Languages	6	
Composition	6	

The Associate of Arts and Associate of Science degrees include both required courses and electives. The required courses are to be selected from the university's LER list. (See Pages 77-80 for these courses.) Electives should be chosen in the students' area of interest. Students planning to pursue a bachelor's degree should select electives to meet the requirements of the degree they are pursuing.

These degrees are offered at each of the seven Regional Campuses.

359

Associate of Applied Business

Accounting Technology

This degree is available at the Ashtabula, East Liverpool, Trumbull and Tuscarawas campuses. Most of the courses in this program are also available at the Geauga and Salem campuses.

I.	TECHN	IICAL COURSES		.29-30
	ACTT	11000, Accounting I—Financial		. 4
		11001, Accounting II—Managerial		. 4
		20012, Accounting Software Applications		.3
		21000, Accounting III—Financial		. 4
		21003, Fundamentals of Tax Preparation		3
		21004, Intro. to Cost Accounting		. 3
	BMRT	11000, Introduction to Business		. 3
	Techni	cal electives**	5	-6
II.	RELAT	ED COURSES		15
	BMRT	21000, Business Law and Ethics I		. 3
	COMT	11000, Intro. to Computer Systems		. 3
	ECON	22060, Principles of Microeconomics		. 3
		22061, Principles of Macroeconomics		. 3
	Choos	e one from:		.3
	ENG	20001, Business Writing (3)		
		20002, Introduction to Technical Writing (3)		
	ITAP	26638, Business Communications (3)		
III.	GENER	RAL STUDIES COURSES		17
	ENG	10001, 10002, College English I, II		. 6
	COMM	1 15000, Theory and Practice of Oral Discourse		3
	MATH	11011, College Algebra		.4
	US	10001, University Orientation		. 1
	Genera	al studies electives***		.3
	Choos	e from the LERs list in Undergraduate Catalog,	in consulta	3-
	tion wi	ith an academic adviser.		
		TO	TAL	61-62

*Students desiring to maximize credit application to a B.B.A. degree may substitute MATH 11012 or 10041 for their technical electives.

- **In consultation with an adviser select from: ACTT, BFRT, BMRT, COMT or ITAP.
- ***Only one of ENG 10000 and MATH 10005 applicable toward degree.

Associate of Applied Business

Banking and Finance Technology

This degree is available only at the Trumbull Campus. Not all courses in this curriculum are offered on a regular basis.

I.	TECHN	IICAL COURSES	36-37
	ACTT	11000, Accounting I-Financial	4
	BFRT	11000, Intro. to Financial Institutions	3
		11001, Money and Banking	3
		21000, Consumer Credit	3
		21002, Analyzing Financial Statements	3
		21012, Seminar in Financial Institution	3
	BMRT	21011, Fundamentals of Financial Management**	3
		21050, Fundamentals of Marketing Technology	3
		21052, Professional Selling Techniques	3
	Select	one option	
	in cons	sultation with adviser: (*Required Courses)	
	Bank (Operations	
	BFRT	11003, Teller Operations (2)	
	*	11010 Trust Department Organization and Services (3)
		Select electives from:	
		11011, Investments (3)	
		21003, Mortgage Lending (3)	
		21092, Internship in Bank/Fin. (2)	
		21095, Special Topics (2-3)	
	Persor	nal Financial Management	
	BFRT*	11010 Trust Department Organization and Services (3)
	*	11011 Investments (3)	
		Select one elective from:	
	BFRT	21003, Mortgage Lending (3)	
		21092, Internship in Bank/Fin. (2)	
		21095, Special Topics (2-3)	
	BMRT	21002, Business Law and Ethics II (3)	
		21054, Insurance Principles (3)	
	Real E	Estate Sales	
	RERT*	11000 Real Estate Princ./Practices (3)	
	*	11001 Real Estate Law (3)	
	*	11003 Real Estate Finance (2)	
	*	21000 Real Estate Appraisal (2)	
II.	RELAT	ED COURSES	15
	BMRT	11000, Intro. to Business	3
	*	11006, Business Computations I	3
		21000, Business Law and Ethics	3

	Сотр	outer Literacy Module	
		Select one from:	3
	COMT	11000, Intro. to Computer Systems (3)	
		21010, Workgroup Productivity Software (3)	
	ITAP	16639, Database Applications (1)	
		16620, Word Processing I (3)	
	Busine	ess Communications Module	
		Select one from:	3
	ENG	20001, Business Writing (3)	
		20002, Introduction to Technical Writing (3)	
	ITAP	26638, Business Communication (3)	
III.	GENEF	RAL STUDIES COURSES	16
	ECON	22060, Principles of Microeconomics	3
	ENG	10001, 10002, College English I, II	6
	PSYC	11762, General Psychology	3
	US	10001, University Orientation	1
	Genera	al studies electives	3
	from t	the LERs	
		TOTAL	67-68

**ACTT 11001, Managerial Accounting can be substituted.

Associate of Applied Business

Business Management Technology

This degree is available at the Ashtabula, East Liverpool, Salem, Trumbull and Tuscarawas campuses. Most of the courses in this program are also available at the Geauga Campus.

I.	TECHN	IICAL CO	OURSES	35-39
	ACTT	11000,	Accounting I - Financial	4
	BMRT	11000,	Intro. to Business	3
		11009,	Intro. to Management Technology	3
		21006,	Human Resources Management	3
		21008,	Case Studies in Mgmt. Technology	3
		21009,	Seminar in Management Technology	3
		21011,	Fundamentals of Financial Management	.3
		21050,	Fundamentals of Marketing Technology	3
		21052,	Professional Selling Techniques	.3
	Select	one opi	tion	•
	In con:	sultation	with adviser: (*Required Courses)	
	Marke	ting/Sal	es	
	BMRT'	21051	Fundamentals of Retailing (3)	
	*	21053	Advertising in Business (3)	
		Select	one elective from:	
	BMRT	21055,	Retail Merchandising (3)	
		21056,	Principles of Visual Display (3)	

		TOTAL 64-68
	Select	3 credit hours from the LERs
	US	10001, University Orientation1
	MATH	11011, College Algebra4
		10002, College English II
	ENG	10001, College English I
	COMM	15000, Theory and Practice of Oral Discourse
III.	GENER	RAL STUDIES COURSES
	ITAP	26638, Business Communications (3)
		20002, Introduction to Technical Writing (3)
	ENG	20001, Business Writing (3)
		Select one from:
	Busine	ess Communications Module:
		16639, Database Applications (1)
	ITAP	16620, Word Processing I (3)
		21010, Workgroup Productivity Software (3)
	COMT	11000, Introduction to Computer Systems (3)
		Select 3 credit hours from:
	Сотри	uter Literacy Module:
	ECON	22060, Principles of Microeconomics
	BMRT	21000, Business Law and Ethics I
II.	RELAT	ED COURSES
	busine	ss management faculty.
	Before	enrolling or applying credit, obtain approval of full-time
	Genera	al Business (7-9)
	TECH	31016, Manufacturing Technology (3)
		22003, Supervision and Labor Relations (5)
	IERT	22000, Statistical Process Control (4)
		21092, Internship in Mgmt. Tech. (1-3)
	BMRT	21005, Purchasing and Supply Management (3)
		Select one elective from:
	TECH*	20002, Materials and Processes I (3)
	BMRT'	* 21004, Introduction to Business Statistics (3)
	Manuf	acturing Management
		Elective in consultation with faculty adviser.
	BMRT	21092, Internship in Mgmt. Tech. (1-3)
		Select one elective from:
		21023, Financing the Business Venture (3)
	BMRT'	*21020 Introduction to Entrepreneurship (3)
	Fntren	reneurshin/Small Rusiness
		21092 Internshin in Mamt Tech (1-3)

Associate of Applied Business

Computer Technology

This program is available at the Ashtabula, East Liverpool, Geauga, Salem, Trumbull and Tuscarawas campuses. The students in

this program may choose to follow concentrations that lead to a specialization in a specific area of information technology (IT) careers. These specializations begin to prepare students for the required examinations for various professional certifications. Students may also choose to pursue a general concentration, which prepares students for positions in small- and mediumsized organizations that require computer staff to perform a wide range of technical duties.

Ι.	TECHN	IICAL CORE COURSES
	COMT	11002, Visual Basic Programming
		11004, Survey of Information Technology
		11005, Introduction to Operating Systems and
		Networking Technology
		11006, Introduction to Web Site Technology
		21010, Workgroup Productivity Software
II.	TECHN	IICAL CONCENTRATIONS:
	Select	one concentration in consultation with adviser.
	Netwo	rk Technology Concentration:
	COMT	11009, Computer Assembly and Configuration 3
		21002, Network Setup and Configuration
	TECH	46310, Technology of Operating Systems
		46311, Technology of Networking
	Compu	ter-related elective (COMT faculty approval required)4
	Applic	ation Development Technology Concentration:
	COMT	20001, Visual C++ Programming
		21004, Advanced Visual C++ Programming4
		21005, Visual Basic Database Programming4
	TECH	46308, Developing Desktop Applications
	Compu	iter-related elective (COMT faculty approval required) 3
	Interne	et/Multimedia Technology Concentration:
	COMT	21007, Internet Ethics and Policies
		21011, Techniques of Multimedia Web Design
		21036, Web Scripting I
	TECH	36310, Multimedia Development Tools
		46321, Web-Database Integration
	Compu	uter-related elective (COMT faculty approval required) 2
	Genera	al Technology Concentration:
	COMT	11009, Computer Assembly and Configuration 3
		20001, Visual C++ Programming
		21002, Network Setup and Configuration4
		21005, Visual Basic Database Programming4
	Compu	uter-related elective (COMT faculty approval required)3
III.	RELAT	ED COURSES
	COMT	12000, Introduction to Computer Systems II
	MATH	11011, College Algebra4
	Choos	e two courses from
	ACTT	11000, Accounting I - Financial (4)
		11001, Accounting II - Managerial (4)
	BMRT	11000, Introduction to Business (3)

			-	TOTAL	61-63
	Elective	es (from	Liberal Education Requirements lis	st):	.6
	ITAP	26638,	Business Communications (3)		
	ENG	20002,	Introduction to Technical Writing (3	3)	
	Choose	e one co	ourse from:		.3
	US	10001,	University Orientation		. 1
	ENG	10001,	College English I		.3
	COMM	15000,	Theory and Practice of Oral Discour	rse	3
IV.	GENER	AL STU	DIES COURSES		16
	MATH	11012,	Intuitive Calculus (3)		
		22061,	Principles of Macroeconomics (3)		
	ECON	22060,	Principles of Microeconomics (3)		
	COMT'	*11000,	Introduction to Computer Systems	(3)	

*COMT 11000 may only be applied toward this degree if taken prior to any other COMT course offering.

Associate of Applied Science

Computer Design and Animation Engineering Technology

This degree is available only at the Tuscarawas Campus. Selected courses are also offered at the Trumbull Campus. The purpose of this program is to prepare graduates for entry-level positions as drafter/designer technicians in engineering and manufacturing industries, as well as in the field of multimedia development.

I.	TECHN	IICAL COURSES	.19
	CADT	22000, Advanced CAD2	
		22001, CAD: Architecture	
		22002, CAD: Civil Applications	
	EERT	22014, Microprocessors and Robotics4	
	IERT	12005, Applications in CAD2	
	MERT	12000, Engineering Drawing	
		12001, Computer-Aided Drafting4	
II.	SPECI	ALTY COURSES	.13
	CADT	22003, Solid Modeling2	
		22004, Computer Animation	
		22005, Multimedia and Virtual Reality Dev2	
	COMT	21010, Workgroup Productivity Software	
		21095, ST: Object Oriented Language	
III.	RELAT	ED COURSES**	.20
	BMRT	11000, Introduction to Business	
	EERT	22003, Technical Computing	
	IERT	22006, Economic Decision Analysis	
	MATH	11011, College Algebra4	
		11012, Intuitive Calculus	
		11022, Trigonometry2	

		Choose one from:
	COMT	21092, Computer Practicum (2)
	IERT	22095, ST: Productivity Software (2)
IV.	GENEF	RAL STUDIES COURSES
	COMN	15000, Theory and Practice Oral Discourse
	ENG	10001, College English I
		20002, Introduction to Technical Writing
	US	10001, University Orientation1
	Genera	al Studies Electives:4
	Select	from the Social Sciences and Humanities lists of the LERs
	in this	Catalog.*
		TOTAL 66

*Only one of ENG 10000 and Math 10005 permitted. Only 2 hours PEB, 3 hours MSCI permitted.

**Tuscarawas students must take MATH 11011, 11022, 19002 (10 hours) or MATH 12001, 12002 (9 hours). For Tuscarawas students the Related Courses hours are 20-21 and the total hours are 66-67.

Associate of Applied Science

Early Childhood Education Technology

This degree is offered at the Ashtabula, Salem and Tuscarawas campuses. The coursework in this associate's degree is fully applicable to the bachelor's in early childhood education offered at the Kent Campus in the College of Education. A minimum 2.00 cumulative GPA is required of students graduating with the associate's degree. However, students who desire to be admitted to the bachelor's program in early childhood education must have a minimum cumulative GPA of 2.50, qualify for selective admission and meet other qualifying conditions that are best understood by consulting with an academic adviser.

I.	TECHN	IICAL COURSES
	ECED	10120, Introduction to Early Childhood2
		20163, Understanding Young Children:
		Typical and Atypical5
	ECET	21005, Child Guidance
		21010, Early Childhood Curriculum I3
		22000, Early Childhood Curriculum II
		22100, Organization of Program and
		Parent Involvement
		22150, Student Teaching6
	EDPF	19525, Inquiry into the Profession4
		29525, Inquiry into Teaching and Learning

		ΤΟΤΑΙ	67
	Humar	ities and Fine Arts elective (select from LER list)	
	Basic S	Science elective (select from LER list)	
	US	10001, University Orientation1	
	PSYC	11762, General Psychology3	
		10002, College English II	
	ENG	10001, College English I	
	COMM	15000, Theory and Practice of Oral Discourse $\hdots \dots 3$	
III.	GENER	AL STUDIES COURSES	.19
	SOC	12050, Introduction to Sociology $\ldots \ldots .3$	
		14002, Basic Math Concepts II	
	MATH	14001, Basic Math Concepts I	
	HDFS	24011, The Family	
II.	RELAT	ED COURSES	.13
	HED	20000, Health Education for Early Childhood Educators . 3	

Degree requirements include those of the Ohio Department of Job and Family Services for completion of:

6 hours of training in first-aid

6 hours of training in communicable diseases

6 hours of training in child abuse knowledge

Associate of Applied Science

Electrical/Electronic Engineering Technology

This degree program is available at the Ashtabula, Trumbull and Tuscarawas campuses. This degree is designed to cover both the electrical engineering and electronics technology fields, including robotics. Technical electives directed to specific program options may be substituted with the approval of a faculty adviser and depend on courses offered at a particular campus. Program options include general option and computer option. The availability of the program options depends upon student interest and local circumstances. Not all courses or options are available on all campuses.

I.	TECHN	IICAL COURSES
	EERT	12000, 12001, Electric Circuits I, II
		12010, Intro. to Electronics
		22004, Digital Systems
		22011, Electronic Systems
		22014, Microprocessors and Robotics
	IERT	22010, Computer Integrated Manufacturing
	MERT	12000, Engineering Drawing 3
		22009, Robotics and Flexible Automation

Co 1	72	C.n
C -4	2	
- 1	ω.	<u></u>

			TOTAL	70-71
	from t	he LERs		
	Social	Sciences or Humanities electives		4
	US	10001, University Orientation		1
		20002, Introduction to Technical Writing		3
	ENG	10001, College English I		3
	COMM	15000, Theory and Practice of Oral Disco	urse	3
III.	GENEF	RAL STUDIES COURSES		14
	PHY	12201, 12202, Technical Physics I, II		7
		11022, Trigonometry		2
		11012, Intuitive Calculus		3
	MATH	* 11011, College Algebra		4
	EERT	22003, Technical Computing		3
II.	RELAT	ED COURSES		19
	EERT	22015, Robotics and Advanced Micro-Sys	stems	3
	COMT	21008, Computer Methods in Sci. and En	a	3
	Comp	uter Option Specialty Courses:		
	IERT	12005, Applications in CAD (2)		
		or		
		12005 Electrical/Electronic Drawing (2)		
	LLINI	22000, Electrical Machines (3)		
	FEDT	22006 Electrical Machines (3)		
	Conor	al Option Specialty Courses		. 5-0
	Color	22005, Instrumentation (3)		E /
	EERI	22002, Industrial Controls (3)		
	FEDT			3
		Chaosa ana fram		2

*Tuscarawas students must take MATH 11011, 11022, 19002 (10 hours) or MATH 12001 12002, (9 hours) due to TAC/ABET accreditation. For Tuscarawas students the Related Courses hours are 19-20.

Associate of Applied Science

Engineering of Information Technology

This degree is available only at the Tuscarawas Campus.

I.	TECHN	IICAL COURSES
	COMT	21095, ST: Object Orientated Language
	EERT	12000, Electric Circuits I4
		12001, Electric Circuits II
		22000, Electricity/Electronics with Applications3
		22004, Digital Systems
		22017, Applied Engineering Software
		22018, PC Network Engineering
	EIRT	22030, Survey of Information Technology

			TOTAL	72
	US	10001, University Orientation		
	TECH	22095, Special Topics in Technology		
		20002, Introduction to Technical Writing .		
	ENG	10001, College English I		
	COMM	15000, Theory and Practice of Oral Discou	urse	
III.	Comm	unication and General Studies Courses .		.14
		12202, Technical Physics II		
	PHY	12201, Technical Physics I		
		19002, Technical Math II		
		11022, Trigonometry		
	MATH	11011, College Algebra		
	EERT	22003, Technical Computing		
II.	Relate	d Courses in Mathematics and Physics .		.20
	TECH	33223, Electronic Communication		
	MERT	12000, Engineering Drawing		
	IERT	12005, Applications in CAD		
		22033, Fiber Optics Technology		
		22032, PC Network Engineering II		

Associate of Applied Science

Environmental Management Technology

This degree is available only at the Salem Campus. The general purpose of this program is to prepare graduates for entry-level positions in industry, regulatory agencies, environmental consulting firms and other institutional settings as environmental technicians. The program includes applied courses in environmental sampling techniques and related equipment use. Courses in this program rely heavily on knowledge from biological and related sciences.

I.	TECHNICAL COURSES		
	BSCI	0110, Biological Diversity4	
		0120, Biological Foundations	
	EMGT	1000, Intro. to Environmental Risk Issues	
		2010, Safety in the Workplace	
		0010, 20011, Environmental Sampling and	
		Problem Analysis I, II	
		0050, Hazardous Substances and	
		Hazardous Waste Management	
		1092, 22092, Practicum in Environmental	
		Management Technology I, II6	
	ENVT	0001, Environmental Law	
II.	RELAT	D COURSES	.15
	BMRT	1000, Introduction to Business	
	CHEM	0050, Fundamentals of Chemistry	

			TOTAL 6	6
	US	10001,	University Orientation1	_
	MATH	11011,	College Algebra 4	
		20002,	Introduction to Technical Writing	
	ENG	10001,	10002, College English I, II	
	COMM	15000,	Theory and Practice of Oral Discourse	
III.	GENER	AL STU	DIES COURSES1	7
	GEOL	21062,	Environmental Geology 3	
	COMT	11000,	Introduction to Computers	
		10053,	Inorganic and Organic Chem. Lab 1	
		10052,	Introduction to Organic Chemistry2	

Associate of Applied Science

Environmental Technology

This degree is offered at the Ashtabula, Trumbull and Tuscarawas campuses and is designed to prepare graduates for entry-level positions in the field of environmental technology. The program includes an environmental core, select basic science courses and appropriate liberal education courses. It is recommended that students interested in matriculating to a four-year program see an adviser for proper guidance.

I. TECHNICAL COURSES		IICAL COURSES
	COMT	11000, Introduction to Computers
	ENVT	10001, Introduction to Environmental Technology3
		10004, Toxicology
		10010, Environmental Hazards Identification and Control 4
		20001, Environmental Law
		20004, Safety and Injury Control
		20008, Environmental Safety Administration
		20092, Environmental Technology Internship I 3
		21092, Environmental Technology Internship II
		Select two courses from the following list
		In consultation with an adviser.
	ENVT	20006, Fire Prevention and Control (3)
		20020, Hazardous Waste Operations
		and Emergency Response (3)
		22095, Special Topics in Environmental Technology (3)
	JUS	22301, The Investigative Process (3)
II.	RELAT	ED COURSES
	BSCI	10110, Biological Diversity4
		10120, Biological Foundations
	CHEM	10054, General and Elementary Organic Chemistry 5
		10053, Inorganic and Organic Lab1
	GEOL	20162, Environmental Geology

III.	GENER	AL STUDIES COURSES		.17
	ENG	10001, College English I	3	
		10002, College English II	3	
	GEOG	21062, Physical Geography		
	MATH	11011, College Algebra	4	
	US	10001, University Orientation	1	
	Genera	I studies elective		
	Select	from the LERs list in this Catalog.		
			TOTAL	68

Associate of Applied Science

High Technology Manufacturing

This degree is offered only at the Trumbull Campus. The twoyear curriculum begins by laying a solid foundation in mathematics, chemistry, physics and electronics before introducing topics in semiconductor manufacturing and photonics. Students gain an understanding of the complete process of taking silicon from its raw state, fashioning it into wafers, manufacturing the integrated circuits on the wafers, and finally testing the integrated circuits to see if they perform to specifications set for the product. Students will learn the use and application of lasers, lightwave communications and optoelectronic devices.

I.	TECHN	IICAL COURSES
	EERT	12000, Electric Circuits I
		12001, Electric Circuits II
		12005, Electrical/Electronic Drawing2
		12010, Introduction to Electronics
		22003, Technical Computing
		22004, Digital Systems
		22011, Electronic Systems
	HTMT	13600, Electronic Materials2
II.	Select	one concentration

General

Photonics

HTMT	13601, Intro. to Photonics & Fiber Optics
	13602, Introduction to Lasers
	13603, Laser & Electro-Optic Components & Devices3
	23603, Light Sources & Wave Optics

* 23607, Laser Technology: Applications	
or Special Topics	

Semiconductor

	EERT	22002, Industrial Controls	
	HTMT	23600, Semiconductor Manufacturing Process I 3	
		23601, Semiconductor Manufacturing Process II3	
		23602, Photolithography in IC Fabrication2	
		23604, Vacuum System Technology2	
		23606, Power Radio Frequency	
III.	Relate	d Courses	16
	MATH	12001, Algebra & Trigonometry	
		12002, Analytical Geometry & Calculus I	
	PHY	12201, Technical Physics I	
		12202, Technical Physics II4	
IV.	Genera	al Studies Courses	18
	CHEM	10060, General Chemistry I4	
		10062, General Chemistry I Lab	
	COMM	15000, Theory and Practice of Oral Discourse	
	ENG	10001, College English I	
		20002, Introduction to Technical Writing	
	US	10001, University Orientation1	
	LER		
		71-7	72

*EERT/IERT/MERT or HTMT special topics course. May be substituted with appropriate EERT/IERT/MERT or HTMT courses(s). Engineering technology faculty adviser's approval is required.

Associate of Applied Science

Horticulture Technology

This degree is offered at the Geauga and Salem campuses. Students who want to emphasize a particular area may concentrate on tree care, lawn care or landscape care. This degree is designed to prepare graduates for entry-level positions in the horticulture industry.

I.	TECHN	TECHNICAL COURSES		
	BSCI	16001, Horticultural Botany		
		26002, Ecological Principles of Pest Management 3		
		26003, Plant Identification and Selection I		
		26004, Plant Identification and Selection II		
	CHEM	16001, Horticultural Chemistry		
	GEOG	16001, Soil and Horticultural Management		
	HORT	16001, Intro. to Horticulture		

		TOTAL	66
Elective	e from the LERs		_
US	10001, University Orientation	1	
PEB	10020, Development and Conditioning	1	
	20002, Introduction to Technical Writing	3	
ENG	10001, College English I	3	
COMM	15000, Theory and Practice of Oral Discou	urse3	
GENER	AL STUDIES COURSES		.14
GEOL	21062, Environmental Geology	3	
COMT	11000, Introduction to Computers	3	
	21052, Professional Selling Techniques $% \left({{\left[{{{\rm{T}}_{\rm{T}}} \right]}} \right)$.	3	
	11006, Business Computations I	3	
BMRT	11000, Introduction to Business	3	
RELAT	ED COURSES		.15
	Turfgrass Management (3)		
	26031, Cooperative Work Experience in		
HORT	26030, Turfgrass Management (3)		
	or		
	in Landscape Management (3)		
	26021, Cooperative Work Experience		
HORT	26020, Landscape Management (3)		
	or		
	26011, Cooperative Work Experience in Th	ree Care (3)	
HORT	26010, Arboriculture (3)	-	
	Select two concentrations from the follow	wing areas . 12	
Techni	cal elective	3	
	26001, Occupational Regulations and Safe	ety2	
	Technik HORT HORT HORT RELAT BMRT COMT GEOL GENER COMM ENG PEB US Elective	26001, Occupational Regulations and Safe Technical elective Select two concentrations from the follor HORT 26010, Arboriculture (3) 26011, Cooperative Work Experience in T or HORT 26020, Landscape Management (3) 26021, Cooperative Work Experience in Landscape Management (3) 26030, Turfgrass Management (3) 26031, Cooperative Work Experience in Turfgrass Management (3) RELATED COURSES BMRT 11000, Introduction to Business 11006, Business Computations I 21052, Professional Selling Techniques COMT 11000, Introduction to Computers GEOL 21062, Environmental Geology GENERAL STUDIES COURSES COMM 15000, Theory and Practice of Oral Discordend ENG 10001,	26001, Occupational Regulations and Safety 2 Technical elective 3 Select two concentrations from the following areas 12 HORT 26010, Arboriculture (3) 26011, Cooperative Work Experience in Tree Care (3) or or HORT 26020, Landscape Management (3) 26021, Cooperative Work Experience in Landscape Management (3) 26021, Cooperative Work Experience in Landscape Management (3) or 0 HORT 26030, Turfgrass Management (3) 26031, Cooperative Work Experience in Turfgrass Management (3) 26031, Cooperative Work Experience in Turfgrass Management (3) RELATED COURSES BMRT 11000, Introduction to Business 3 21052, Professional Selling Techniques 3 21052, Professional Selling Techniques 3 3 GEOL 21062, Environmental Geology 3 3 GENERAL STUDIES COURSES 3 COMM 15000, Theory and Practice of Oral Discourse 3 20002, Introduction to Technical Writing 3 20002, Introduction to Technical Writing 3 20002, Introduction to Technical Writing 1

Associate of Applied Science

Human Services Technology

This degree is offered at the Ashtabula and Salem campuses and is designed to prepare graduates for entry-level positions at a beginning, preprofessional level of practice in a variety of human service agencies. The program includes applied courses in social services and supervised internships for second-year students in local human services agencies. The core of the curriculum is focused on client advocacy and case management. Admission to the program requires admission to the university and approval of an application, which includes, at minimum, the completion of 18 credit hours in the first year. Students may begin the program on a full- or part-time basis but must register for at least 9 credit hours in the third and fourth semesters. Detailed information and requirements for admission, satisfactory progress and graduation are in the student handbook for this program. A copy of the handbook may be obtained from the program director. 366

I.	TECHI	NICAL COURSES		.33
	HED	11590, Community Health	3	
	HST	11000, Introduction to Human Services	1	
		11001, Group Process in Human Services	2	
		11002, Survey of Community Resources	3	
		21000, Dynamics of Helping Relationship	3	
		21001, Assessment of Client Needs	3	
		21002, Client Advocacy and Case Mgt	3	
		21092, Internship I	3	
		21192, Internship II	3	
	SOC	32762, Deviant Behavior	3	
	Electiv	ves	6	
	Choos	se from: HED 22530, 32544, SOC 32400, 32570, CON	IT	
	11000	0, ITAP 16680.		
II.	RELAT	TED COURSES		.17
	HED	11570, Personal Health	3	
		14020, Medical Terminology	2	
		21050, Health Behavior and Advocacy	3	
	PSYC	11762, General Psychology	3	
		21211, Psychology of Adjustment	3	
	SOC	12050, Introduction to Sociology	3	
III.	GENE	RAL STUDIES COURSES		.16
	COMN	A 15000, Theory and Practice of Oral Discourse	3	
	ENG	10001, College English I	3	
		20002, Introduction to Technical Writing	3	
	US	10001, University Orientation	1	
	Electiv	ves	6	
	From	the Social Sciences and Humanities lists of the LERs.		
		TOTAL		66

Associate of Applied Business

Information Technology for Administrative Professionals

This degree is offered at the Ashtabula, Salem, Trumbull and Tuscarawas campuses. Program options are offices services, administrative assistant and office management. Some options are not available at the Salem Campus. Technical electives depend on the option chosen and the typing and shorthand skills of the students at the time of first enrollment. Please study options listed in this Catalog and consult a faculty adviser.

I.	TECHN	IICAL COURSES	30
	ITAP	16605, Intro. to Operating Systems & Networking Tech3	
		16620, Word Processing I 3	
		16621, Word Processing II 3	
		16625, Business Presentations	
		16636, Data Management for Admin. Professionals 3	

			TOTAL 62
	Select	from LE	Rs list in this Catalog.
	Genera	al studie	s electives: 6
	US	10001,	University Orientation1
	ITAP	26638,	Business Communications
	ENG	10001,	College English I 3
	COMM	15000,	Theory and Practice of Oral Discourse
III.	GENEF	RAL STU	DIES COURSES16
		21011,	Techniques of Multimedia Web Design (3)
		21010,	Workgroup Productivity Software (3)
		21007,	Internet Ethics and Policies (3)
		12000,	Introduction to Computer Systems II (3)
		11006,	Introduction to Web Site Technology (3)
		11004,	Survey of Information Technology (3)
	COMT	11000,	**Introduction to Computer Systems (3)
	BMRT	11000,	Introduction to Business (3)
	ACTT	20012,	Accounting Software Applications (3)
	Relate	d Electi	ves9
	BMRT	11006,	*Business Computations I
	ACTT	11000,	Accounting I - Financial 4
II.	RELAT	ED COU	RSES
		26691,	Seminar for Admin. Professionals
		26636,	Project Management for Admin Professionals 1
		26635,	Administrative Resource Management
		26623,	Desktop Publishing II
		26622.	Desktop Publishing I
		26611.	Spreadsheet Applications
		16639,	Database Applications 1

*With a faculty adviser's approval, this course may be taken Credit-By-Exam or replaced with more advanced mathematics, statistics or accounting.

**This course may be applied as a related elective if taken prior to or concurrently with any other COMT or ITAP offering.

Associate of Arts

Justice Studies

This curriculum is offered for students planning to pursue the Bachelor of Arts degree with a justice studies major. It is available at the Ashtabula, East Liverpool, Stark, Trumbull and Tuscarawas campuses.

I.	MAJO	R COURSES
	JUS	12000, Intro. to Justice Studies
		22100, Basic Interviewing

22300, Police Role	
26701, Corrections	
26702, Criminology3	
26704, Law and Society	
JUS electives	
GENERAL STUDIES COURSES	88
ENG 10001, 10002, College English I, II6	
Humanities and Fine Arts	
from the LERs	
Social Sciences	
from the LERs	
Basic Sciences	
at least 6 hours from the LERs.	
Mathematics, Logic, and Foreign Languages	
One course in mathematics or logic from the LERs (MATH	
14001, 14002 not acceptable), or one foreign language course.	
US 10001, University Orientation	
TOTAL 61-6	-
	22300, Police Role .3 26701, Corrections .3 26702, Criminology .3 26704, Law and Society .3 JUS electives .6 GENERAL STUDIES COURSES .37-3 ENG 10001, 10002, College English I, II .6 Humanities and Fine Arts .9 from the LERs

Associate of Applied Science

Laboratory Technology

This degree is offered at the Trumbull Campus. It is designed to prepare graduates with applied skills and knowledge for employment as laboratory assistants in commercial, industrial and environmental testing laboratories. The program includes a laboratory technology core with concentrations in environmental laboratory or industrial laboratory from which students may choose; related courses and general studies courses are designed to support the technical courses. Students planning on continuing in a four-year program should consult with an academic adviser.

I.	TECHN	IICAL COURSES	3
	ENVT	10004, Toxicology	
		20020, Hazardous Waste Operations &	
		Emergency Response	
	LABT	11001, Laboratory Safety 3	
		11002, Laboratory Quality Control and	
		Quality Assurance4	
		11004, Applied Laboratory Technology	
		21001, Introduction to Industrial Chemical Processes2	
		21092, Internship in Laboratory Technology1-2	
		21095 Special Topics in Laboratory Technology3	
	Select	t one option:	0
	Enviro	nmental Laboratory Option	
	ENVT	10001, Introduction to Environmental Technology (3)	

			TOTAL	63-65
	Electiv	e from LERs	· · · · · · · · · · · · · · ·	.3
	US	10001, Orientation		.1
		20002, Introduction to Technical Writing .		.3
		*Prerequisite ENG 10000 - 3 hours or test	t	
	ENG *	10001, College English I		.3
		10053, Inorganic and Organic Lab		.1
		10052, Introduction to Organic Chemistry		.2
	CHEM	10050, Fundamentals of Chemistry		.3
III.	GENEF	RAL STUDIES COURSES		16
	PHY	12201, Technical Physics I		.3
	MATH	19001, Technical Mathematics I		.4
	COMT	11000, Introduction to Computer Systems	S	.3
		20112, Elementary Quantitative Lab		.2
	CHEM	20111, Elementary Quantitative Analysis .		.4
II.	RELAT	ED COURSES		16
	PLCT	12000, Introduction to Plastics (4)		
		22006, General Mechanical Laboratory (3))	
	MERT	12005, Properties of Materials (3)		
	Indust	rial Laboratory Option	-	
	LABT	20010, Industrial Hygiene & Environmenta	al Testing (3)	
		20001, Environmental Law (3)		

Associate of Applied Science

Legal Assisting Technology

This degree is available at the East Liverpool and Trumbull campuses and is designed to train students as legal assistants (paralegals).

I.	TECHN	IICAL COURSES
	LEGT	18000, Intro. to Paralegal Studies
		18001, Legal Research and Writing
		18003, Family Law and Procedure
		21092, Internship2
		28004, Principles and Practice of Litigation3
		28005, Civil Litigation
		28006, Adv. Legal Research and Writing3
		28007, Estate and Probate Admin 3
		28008, Prof. Develop. for Paralegals 1
II.	TECHN	IICAL ELECTIVES
	ACTT	21003, Fundamentals of Tax Preparation (3)
	BMRT	11009, Intro . to Management Technology (3)
		21000, Business Law and Ethics I (3)
		21002, Business Law and Ethics II (3)
	ENG	20002, Introduction to Technical Writing (3)
	JUS	12000, Intro. to Justice Studies (3)

Regional Campuses

		22100, Basic Interviewing (3)
		22301, The Investigative Process (3)
	LEGT	18002, Corporate Law (3)
		18004, Tort Claims for Paralegals (3)
		18005, Employment Regulations (3)
	RERT	11000, Real Estate Principles and Practices (3)
		11001, Real Estate Law (3)
III.	RELAT	ED COURSES
	ACTT	11000, Accounting I - Financial
	BMRT	11000, Intro. to Business
	*	11006, Business Computations I
	COMT	11000, Intro. to Computer Systems
IV.	GENER	AL STUDIES COURSES
	COMM	15000, Theory and Practice of Oral Discourse
	ENG	10001, College English I 3
		10002, College English II
	US	10001, University Orientation1
	Choose	e 3 hours from:
	PSYC	11762, General Psychology (3)
	SOC	12050, Intro. to Sociology (3)
	Choose	e 6 hours from:
	ECON	22060, Principles of Microeconomics (3)
	GEOG	10160, Introduction to Geography (3)
		17063, World Geography (3)
	JUS	26704, Law and Society (3)
	POL	10001, Introduction to Political Science (3)
		10004, Comparative Politics (3)
		10100, American Politics (3)
		10301, Diversity in American Public Policy (3)
		10500, World Politics (3)
	PSYC	20651, Child Psychology (3)
		21211, Psychology of Adjustment (3)
	SOC	12050, Introduction to Sociology (3)
		32400, Individual and Society (3)
		32570, Inequality in Societies (3)
		TOTAL 68

*A higher-level math course may be substituted.

Associate of Applied Science

Manufacturing Engineering Technology

This degree is available only at the Salem Campus. This degree is designed to prepare students for entry-level technical jobs in manufacturing. Subject matter includes computer-aided design (CAD), computer-aided manufacturing (CAM), computer numerical control (CNC), industrial controls and programmable logic controllers (PLCs), with an emphasis on industrial automation. There are two options within the degree: (1) the industrial automation option, and (2) the automated machining option.

I.	TECHNICAL COURSES					
	Engine	Engineering Technology Core:				
	EERT	22000, Electricity/Electronics with Applica	tions3			
		22002, Industrial Controls	3			
	IERT	12005, Applications in Computer-Aided De	esign2			
		22010, Computer Integrated Manufacturin	g3			
	MERT	12000, Engineering Drawing	3			
		12001, Computer Aided Drafting	4			
		12005, Properties of Materials	3			
		22012, Fluid Power	3			
	MFGT	12010, Safety in the Workplace	2			
		21001, Standard Design Practice for Manu	Ifacturing 3			
	Select	one option:	6			
	Indust	rial Automation Option Specialty Courses.				
	EERT	22013, Industrial Electronics (3)				
	MFGT	22014, Advanced Industrial Electronics (3)			
	Autom	ated Machining Option Specialty Courses	:			
	MFGT	13001, Computer Numerical Control Prog	ramming (3)			
		23001, Computer Aided Manufacturing I (3)			
II.	RELAT	ED COURSES		.17		
	EERT	22003, Technical Computing	3			
	IERT	22000, Statistical Process Control	4			
	PHY	13001, General College Physics I	5			
		13002, General College Physics II	5			
III.	GENER	RAL STUDIES COURSES		.14		
	COMM	15000, Theory and Practice of Oral Discou	ırse3			
	ENG	10001, College English I	3			
		20002, Introduction to Technical Writing	3			
	MATH	12001, Algebra & Trigonometry				
	US	10001, University Orientation	1			
			TOTAL	66		

Associate of Applied Science

Mechanical Engineering Technology

(Integrated Manufacturing)

This degree is designed to explore mechanical engineering technology, with emphasis on integrated manufacturing. Subject matter includes drafting, CAD/CAM, CNC, materials testing and robotics applications. Technical electives may be substituted with the approval of a faculty adviser. The general concentration of this degree program is available at the Ashtabula, Trumbull and

369

Tuscarawas campuses. The systems concentration is an individualized concentration, which must be developed with an adviser's assistance; it is available only at the Ashtabula Campus (see also Systems Engineering Technology). The polymer concentration is available at the Ashtabula and Trumbull campuses. The radiation polymer concentration is available at the Ashtabula, Trumbull and Tuscarawas campuses.

I.	TECHN	IICAL COURSES			
	Engine	Engineering Technology Core:			
	EERT	22014, Microprocessors and Robotics			
	IERT	22010, Computer Integrated Manufacturing			
	MERT	12000, Engineering Drawing			
		12001, Computer-Aided Drafting4			
		12005, Properties of Materials			
		22009, Robotics and Flexible Automation			
	Choos	e one Concentration			
	Genera	al Concentration:			
	MERT	12004, Manufacturing Processes			
		22002, Statics and Strength of Materials5			
		22003, Computer-Aided Tool Design			
		22004, Mechanics and Machine Design5			
		22012, Fluid Power			
	Polym	er Concentration:			
	Availat	ble only at the Ashtabula and Trumbull campuses.			
	IERT	22000, Statistical Process Control4			
	PLCT	12000, Intro. to Plastics			
		12003, Reinforced Plastics			
		12004, Properties of Plastics Materials			
		22000, Assembly and Finishing of Plastics			
	Radiation Polymer Concentration:				
	Availab	le only at the Ashtabula, Trumbull and Tuscarawas campuses.			
	PLCT	12000, Intro. to Plastics			
		12003, Reinforced Plastics			
		12005, Radiation Polymer Tech. I			
		22006, Radiation Polymer Tech II			
	IERT	22000, Statistical Process Control4			
	Systems Concentration:				
	Available only at the Ashtabula and Salem campuses.				
	IERT	12005, Applications in CAD			
	MERT	12004, Manufacturing Processes			
	Select	11-14 hours of engineering technology courses in consul-			
	tation	with adviser.			
II.	RELAT	ED COURSES			
	EERT	22003, Technical Computing			
	MATH'	* 11011, College Algebra 4			
		11012, Intuitive Calculus			
		11022, Trigonometry			
	PHY	12201, 12202, Technical Physics I, II			
III.	GENER	RAL STUDIES COURSES			

	TOTAL 69-72
Choos	se from the LERs.
Social	Sciences or Humanities electives4
US	10001, University Orientation1
	20002, Introduction to Technical Writing
ENG	10001, College English I 3
COIVIN	/ 15000, Theory and Practice of Oral Discourse

*Tuscarawas students must take MATH 11011, 11022, 19002 (10 hours) or MATH 12001, 12002 (9 hours) due to TAC/ABET accreditation. For Tuscarawas students the Related Courses hours are 19-20 and the total hours are 72-73.

Associate of Applied Science

Nursing

The Associate of Applied Science in Nursing is available at the Ashtabula, East Liverpool and Tuscarawas campuses. Students interested in the program should apply directly to one of these campuses and meet with the director of nursing for additional application details concerning advanced placement, etc. Detailed information and requirements for admission, satisfactory progress and graduation are in the brochure for this program. A copy of the brochure may be obtained from the program director.

With the successful completion of the program, graduates are awarded an Associate of Applied Science in Nursing degree and are eligible to apply to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN).

Kent State University is accredited by The Higher Learning Commission and is a member of the North Central Association. The Associate Degree in Nursing program is accredited by the National League for Nursing, Accrediting Commission, 61 Broadway, New York, NY 10006, (212) 363-5555, ext. 153.

I.	NURSI	NG COURSES*
	NRST	10001, Foundations of Nursing Agency5
		10002, Intro. to Nursing Processes
		10003, Nursing Agency I 6
		10004, Older Adult Dev. Self-Care
		10005, Therapeutic Use of Self
		20206, Nursing Agency II5
		20207, Psychosocial Self-Care Deficits
		20208, Nursing Agency III6
		20209, Maternal/Newborn Dev. Self-Care
		20210, Child and Family Dev. Self-Care

		TOTAL	70
	Electiv	e***	
	US	10001, University Orientation1	
	SOC	12050, Intro. to Sociology	
	PSYC	11762, General Psychology	
	ENG	10001, 10002, College English I, II	
III.	GENEF	AL STUDIES COURSES	.16
	NUTR	33512, Nutrition**	
		10052, Organic Chemistry (2)**	
		10050, General Chemistry (3)**	
		or	
	CHEM	10054, Gen. and Elem. Organic Chemistry (5)**	
		<i>Choose either</i>	
		20021, Basic Microbiology**	
	BSCI	20020, Biol. Structure and Function**	
II.	RELAT	ED COURSES	.16
		for Health Professionals	
	NURS	20950, Human Growth and Development	
		20211, Contemporary Nursing Issues1	

*A grade of C or better in theory and a designation of "passing" for performance in the clinical area must be achieved for each nursing course. A GPA of 2.00 must be maintained to progress in the nursing program.

- **A grade of C or better in BSCI 20020, BSCI 20021, CHEM 10054 (or CHEM 10050, 10052) and NUTR 33512 must be obtained.
- ***Electives must be in the area of communication, management, computer, psychology, sociology, foreign language or LERs. Permission should be obtained from the director of nursing.

The associate's degree in nursing program, Regional Campuses, reserves the right to initiate changes in the program as deemed necessary for maintaining quality nursing education.

Associate of Applied Science

Occupational Therapy Assisting Technology

The Associate of Applied Science in Occupational Therapy Assisting is offered at the East Liverpool Campus. This program is fully accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220, (301) 652-AOTA. With the successful completion of the program, graduates are awarded the Associate of Applied Science degree, and are eligible to sit for the National Certification Examination for Occupational Therapy Assistants administered by the National Board for Certification of Occupational Therapists (NBCOT). Admission to the program requires admission to the university, a minimum of 40 hours of volunteer time in an occupational therapy setting, high school or college algebra and general biology, completion of the COMPASS test, and if necessary, recommended coursework. Application deadline is Jan. 15. Program applicants are encouraged to meet with the program director. Detailed information and requirements for admission, satisfactory progress and graduation are in the student handbook for this program. A copy of the handbook may be obtained from the program director.

I.

			TOTAL	67
	Electiv	e*		
	US	10001,	University Orientation1	
	SOC	12050,	Intro. to Sociology	
	PSYC	11762,	General Psychology3	
	ENG	10001,	10002, College English I, II6	
III.	GENEF	RAL STU	DIES COURSES	.16
		20001,	The rapeutic Communications \hdots	
	PTAT	10002,	Analysis of Movement	
	PSYC	21211,	Psychology of Adjustment3	
			for Health Professionals	
	NURS	20950,	Human Growth and Development	
	BSCI	11001,	Anatomy for Physical and Occupational Therapy 5	
II.	RELAT	ED COU	RSES	.16
	18 mo	nths of i	the didactic coursework.	
	Note: (Clinical e	education must be successfully completed within	
		20005,	Clinical Applications	
		20004,	Therapeutic Techniques III - Developmental 3	
		20003,	Therapeutic Media III	
		20002,	Therapeutic Media II	
		20001,	Occupational Therapy Management Skills 2	
			Physical Dysfunction	
		20000,	Therapeutic Techniques II -	
			Psychosocial Dysfunction	

*Course to have communication or management focus.

Comprehensive Business Education Baccalaureate Degree

Students interested in a four-year degree in comprehensive business education should follow the program outlined under the Department of Vocational Education in the College of Education section of this Catalog.

Associate of Applied Science

Physical Therapy Assisting

The Associate of Applied Science in Physical Therapy Assisting program is offered at the Ashtabula and East Liverpool campuses. With the successful completion of the program, graduates are awarded the Associate of Applied Science in Physical Therapy Assisting and are eligible to take the licensing examination given by the State of Ohio Board of Occupational and Physical Therapy. Students interested in the program should apply directly to the East Liverpool Campus or Ashtabula Campus and meet with the program director. Detailed information and requirements for admission may be obtained from the Kent State East Liverpool or the Ashtabula Campus program office.

			TOTAL	70
	Select	an elect	ive from the LERs*	
	US	10001,	University Orientation1	
	SOC	12050,	Intro. to Sociology	
	PSYC	11762,	General Psychology3	
	ENG	10001,	10002, College English I, II6	
III.	GENEF	RAL STU	DIES COURSES	.16
		20001,	Ther. Comm. in Physical Therapy1	
		10009,	Medical Terminology	
	PTAT	10002,	Analysis of Movement	
	PHY	12111,	Physics for Health Technologies	
			for Health Professionals3	
	NURS	20950,	Human Growth and Development	
	BSCI	11001,	Anatomy for Phys. and Occup. Therapy5	
II.	RELAT	ED COU	RSES	.17
		20008,	Clinical Conditions III2	
		20007,	Dir. Practice in Physical Therapy III	
		20006,	Physical Rehabilitation Procedures4	
		10005,	20005, Directed Practice in PT I, II	
		10004,	20004, Physical Therapy Procedures I, II8	
		10003,	20003, Clinical Conditions I, II	
		10001,	Prin. of Patient Care in Physical Therapy 4	
	PTAT	10000,	Intro. to Physical Therapist Assisting	
I.	TECHN	IICAL CO	OURSES	.37

*COMM 15000 recommended.

A grade of C or better in theory and a designation of "passing" in the clinical component must be achieved for each physical therapy assisting course to progress to the next course in the program sequence.

The associate's degree in the physical therapy assisting program reserves the right to initiate changes in the program as deemed necessary for maintaining quality education for the students.

Associate of Applied Science

Plastics Manufacturing Engineering Technology

This degree is offered at the Trumbull and Tuscarawas campuses. It is designed to prepare students for careers in plastics manufacturing and related industries. The program emphasizes the development of strong mathematical and analytical problem solving skills, with coursework providing a foundation in chemistry and physics. The program also incorporates computer applications in manufacturing processes and product development. Coursework focuses on the application of skills and knowledge in both simulated and actual manufacturing environments.

I.	TECHN	NOLOGY COURSES	.36-37
	Engine	eering Technology Core:	
	EERT	22000, Electricity/Electronics with Applications	.3
	IERT	12005, Applications in CAD	.2
	MERT	12000, Engineering Drawing	.3
		12005, Properties of Materials	.3
		22002, Statics & Strength of Materials	.5
		22012, Fluid Power	.3
	Choos	e one of:	.2
	TECH	33056, Cooperative Education (2)	
		43096, Individual Investigation (2)	
	Plastic	cs Manufacturing Courses:	
	PLCT	12000, Introduction to Plastics	.4
		12004, Properties of Plastics Materials	.3
		22001, Plastics Product Design	.3
		22002, Plastics Tool Design	.3
	Choos	e one:	-3
		12003, Reinforced Plastics (3)	
		22005, Plastics Manufacturing (2)	
II.	RELAT	ED COURSES	18
	EERT	22003, Technical Computing	.3
	IERT	22000, Statistical Process Control	.4
	MATH	12001, Algebra & Trigonometry	.4
		19002, Technical Math II	.4
	PHY	12201, Technical Physics I	.3
III.	GENEF	RAL STUDIES COURSES	15
	CHEM	10054, General & Organic Chemistry	5

372

		TOTAL	69-70
US	10001, University Orientation	. <u></u>	1
	20002, Introduction to Technical Writing		3
ENG	10001, College English I		3
COMM	1 15000, Theory and Practice of Oral Disco	urse	3

Associate of Applied Science

Radiologic Technology

The Associate of Applied Science in Radiologic Technology is offered at the Salem Campus. With the successful completion of the program, graduates are eligible to take the certification examination administered by the American Registry of Radiologic Technologists. Admission to the program is on a selective basis due to the limited number of students approved for each clinical education center. The application deadline is Feb. 1. Program applicants are encouraged to meet with an adviser at the Salem Campus to discuss the minimum admission requirements. Detailed information and requirements for admission, satisfactory progress and graduation are in the student handbook for this program. A copy of the handbook may be obtained from the program director.

I.	TECHN	IICAL COURSES
	RADT	14000, Intro. to Radiologic Technology
		14001, Orient. to Clinical Radiography2
		14010, Clinical Education I1
		14011, Clinical Education II1
		14012, Clinical Education III1
		14013, Clinical Education IV1
		14019, Radiographic Exposure and Imag. I
		14020, Radiographic Procedures I5
		14021, Radiographic Procedures II
		14022, Radiographic Exposure and Imag. II
		24002, Radiation Protection
		24010, Clinical Education V1
		24011, Clinical Education VI1
		24020, Radiographic Procedures III
		24022, Radiographic Exposure and Imag. III
II.	RELAT	ED COURSES
	BSCI	11000, Principles of Anatomy for Radiologic Technology 4
	COMT	11000, Introduction to Computers
	HED	14020, Intro. to Medical Terminology
	RADT	14002, Intro. to Patient Care
		14004, Radiologic Physics
		24001, Radiologic Pathology
III.	GENER	RAL STUDIES COURSES17
	CHEM	10050, Fundamentals of Chemistry

		TOTAL	70
US	10001, University Orientation	<u>1</u>	
PSYC	11762, General Psychology	3	
MATH	11011, College Algebra	4	
ENG	10001, 10002, College English I, II	6	

Associate of Applied Science

Systems/Industrial Engineering Technology

This degree is available at the Trumbull and Tuscarawas campuses. Systems engineering is available as an individualized option at the Ashtabula and Salem campuses under the mechanical engineering technology program. Not all courses are available at all campuses, nor are all courses regularly scheduled. Individualized option programs must be developed in consultation with an academic adviser.

I.	TECHN	IICAL COURSES
	EERT	22014, Microprocessors and Robotics
	IERT	22000, Statistical Process Control
		22006, Economic Decision Analysis
		22010, Computer Integrated Manufacturing
	MERT	12000, Engineering Drawing
		12001, Computer-Aided Drafting4
		12004, Manufacturing Processes
		22009, Robotics and Flexible Automation
		Choose 10 hours:
	COMT	21008, Computer Meth. in Sci. and Eng (3)
	EERT	22004, Digital Systems (3)
	IERT	12005, Applications in CAD (2)
		22001, Motion and Time Study (3)
		22003, Supervision and Labor Relations (5)
		22004, Facilities Engineering (2)
		22005, Production and Inventory Control (2)
		22008, Taguchi Process Improvement (3)
II.	RELAT	ED COURSES
	EERT	22003, Technical Computing3
	MATH	*11011, College Algebra 4
		11012, Intuitive Calculus
		11022, Trigonometry2
	PHY	12201, 12202, Technical Physics I, II7
III.	GENEF	RAL STUDIES COURSES14
	COMM	15000, Theory and Practice of Oral Discourse
	ENG	10001, College English I 3
		20002, Introduction to Technical Writing3
	Social	Sciences or Humanities electives4
	from t	he LERs.

US 10001, University Orientation

TOTAL

70

*Tuscarawas students must take MATH 11011, 11022, 19002 (10 hours) or MATH 12000, 12001 (9 hours). For Tuscarawas students the Related Courses hours are 19-20 and the total hours are 70-71.

Associate of Technical Study (Category B)

Radiologic Technology Completion Program

The Salem Campus also offers associate's degree completion programs for certified radiologic technologists and diagnostic medical sonographers who have completed their training at an accredited institution and have been certified by the American Registry of Radiologic Technologists or American Registry of Diagnostic Medical Sonographers.

Students interested in one of these programs should apply to the Salem Campus and meet with the director of radiologic technology for additional application details. Upon admission to these programs, students will be granted 32 credit hours on the basis of their certification. In addition, they must successfully complete a minimum of 32 or 33 hours of courses selected in accordance with the following curricula:

- · Associate of Technical Study in Radiologic Technology,
- Associate of Technical Study in Nuclear Medicine Technology,
- · Associate of Technical Study in Radiation Therapy Technology,
- Associate of Technical Study in Diagnostic Medical Sonography.

Credits awarded on the basis of certification
Basic Sciences, Math*, computer technology15
College English 10001, 100026
Humanities and Fine Arts3
Social Sciences
University Orientation1
*MATH 10004, Developmental Mathematics, and MATH 10005,
Introduction to College Mathematics, cannot be included in this
section.

The total degree will consist of 66 hours. Coursework may be pursued at any Regional Campus, but students must be advised by the director of radiologic technology, housed at the Salem Campus.

Associate of Technical Study

Radiology Department Management

Thirty-two credits are awarded on the basis of certification as radiologic technologist. In addition, the following coursework is required:

I.	RELAT	ED COURSES
	BMRT	11000, Intro. to Business
		11009, Intro. to Management Technology
		21006, Human Resources Management
		21008, Case Studies in Mgmt. Technology
		21096, Individual Investigation
	COMT	11000, Intro. to Computer Systems
	RADT	21095, Special Topics:
		Contemporary Issues in Rad. Tech
II.	GENEF	AL STUDIES COURSES
	COMM	15000, Theory and Practice of Oral Discourse
	ENG	10001, College English I
		20002, Introduction to Technical Writing
	US	10001, University Orientation
	One of	the following pairs:6-7
	BSCI	10001 and 10002
	ECON	22060 and 22061
	MATH	11011 and 11012
	PSYC	11762 and 21211
		TOTAL 68-69

The total degree will consist of 68-69 hours. Coursework may be pursued at any Regional Campus offering appropriate courses, but students must be advised by the director of radiologic technology, housed at the Salem Campus.

Associate of Technical Study (Category A)

The Associate of Technical Study degree program is open to students who need a specially designed course of study in a technical field. It consists of courses offered at the students' campus that suit the students' career goals. Degree programs must be planned with the help of a faculty adviser.

The program consists of a minimum of 61 semester hours of coursework, including University Orientation. At least 30 hours are made up of "technical core" courses that offer education central to students' career goals. At least 15 hours must consist of basic courses that provide background to the technical core, and at least 15 hours must be selected from the LERs on Pages 77-80. The degree program should not exceed 73 hours.

Degree programs must be approved by the faculty adviser, the campus dean, and the dean for academic affairs, Regional Campuses. At least 32 hours must be completed after approval of the written degree program proposal.

The Associate of Technical Study may be conferred as a concurrent degree or when students already hold another degree. At least 24 hours of coursework must be completed after approval of the program, and the program must include at least 24 hours of work in addition to the prior or concurrent degree.

Forms for developing an A.T.S. program proposal can be obtained at any Regional Campus student services office.

Associate of Technical Study (Category B)

The Associate of Technical Study degree program, Category B, provides associate's degree-level completion based on a technical certificate or other formal technical training program acquired outside Kent State University. The block of credits awarded for technical training outside Kent State University is not applicable to any other degree programs. See Radiologic Technology Completion programs on Page 373 of this Catalog.

Associate of Technical Study

Industrial Trades Technology

The Geauga and Trumbull campuses offer an associate's degree completion program for students who have completed four years of apprenticeship/journeyman training. Apprentices must have completed their training from an organization working in cooperation with the Bureau of Apprenticeship and Training in the U.S. Department of Labor.

Students interested in this program should apply to Kent State Geauga or the Trumbull Campus and must meet with an adviser to be admitted to this program. Upon admission to this program, students will be granted 30 credit hours on the basis of their apprenticeship training. In addition, they must successfully complete a minimum of 35 hours of courses selected in accordance with the following curriculum:

I.	TECHN	IICAL COURSES		.30
II.	RELAT	ED COURSES		.15
	COMT	11000, Introduction to Computers	3	
	IERT	22003, Supervision and Labor Relations	5	
		22006, Economic Decision Analysis	3	
	MATH	11011, College Algebra	4	
III.	GENE	RAL STUDIES COURSES		.20
	COMM	15000, Theory and Practice of Oral Disco	urse3	
	ECON	22060, Principles of Microeconomics	3	
	ENG	10001, College English I	3	
		Choose one from:		
		20001, Business Writing (3)		
		20002, Introduction to Technical Writing	(3)	
	PSYC	11762, General Psychology	3	
	US	10001, University Orientation	1	
	Genera	al studies electives		
	Select	from the LERs list in this Catalog, in const	Iltation with an	
	acadei	nic adviser.		
			TOTAL	65

Coursework may be pursued at any Regional Campus, but students must be advised by an adviser at the Geauga or Trumbull campuses.

MILITARY STUDIES

AIR FORCE RESERVE OFFICER TRAINING CORPS (AFROTC) Overview

The Air Force ROTC program provides professional preparation for students considering service as officers in the U.S. Air Force. The program offers information on Air Force career opportunities and the role of the military in the American society.

There are two primary AFROTC programs under which applicants may earn their commissions. The first is a four-year AFROTC program. It includes membership in (and completion of) the General Military Course (GMC), a four-week field training course and the Professional Officer Course (POC). The second is a two-year program designed for students who have two years of academic work remaining. In the two-year program, students are selected to participate in the POC program and attend a five-week field training course, which includes coursework covered during the freshman and sophomore years. Both programs result in a commission as a second lieutenant in the United States Air Force. Periodically the Air Force activates a one-year program to attract students majoring in fields in which the Air Force has a manpower shortage.

CURRICULUM

Registering

Courses normally are taken for academic credit as part of the students' electives. Entering freshmen and sophomores may register for aerospace studies courses at the same time and in the same manner as they enroll in their other college courses. Juniors and seniors wishing to enroll in AFROTC should call the AFROTC unit admissions officer prior to enrollment to discuss the particular requirements.

The curriculum in aerospace studies is divided into two parts: the General Military Course, (usually taken during the freshman and sophomore years), and the Professional Officer Course, (normally taken during the junior and senior years). Air Force officers are assigned as full-time faculty members and teach all aerospace studies courses. Freshmen may register for ASTU 10101 and 10103 for the fall term and ASTU 10102 and 10104 for the spring term; sophomores may register for ASTU 20101 and 20103 for the fall term and ASTU 20102 and 20104 for the spring term. The courses include 1 hour of academic instruction and a 2-hour leadership laboratory each week. Nonscholarship students incur no military obligation when enrolled in freshman- and sophomore-level courses. Juniors will register for ASTU 30101 and 30103 for the fall term and ASTU 30102 and 30104 for the spring term. Continuing seniors in the AFROTC program will register for ASTU 40101 and 40103 for the fall term and ASTU 40102 and 40104 for the spring term. Due to the excellent leadership and management training, as well as the hands-on experience in the POC, the students are eligible to receive additional credit for activities completed while in the

program. The students can receive credit for their performance at Field Training (ASTU 20105 and 20106) and based on the positions and responsibilities held while training other cadets (ASTU 30192).

The General Military Course

The General Military Course (GMC) is offered in four-sequenced lower-division aerospace studies courses. Each course consists of 1 hour of academic instruction per week and 15 leadership laboratory contact hours per semester. Nonscholarship membership in the GMC affords students the opportunity to learn about the Air Force and its role in the American society. Students who do not want commissions may take the aerospace studies courses for academic credit only. There is no military obligation incurred by enrolling in the GMC.

The Professional Officer Course

The Professional Officer Course (POC) is a four-part upper-division aerospace studies course. Each course consists of 3 hours of academic instruction per week and 15 leadership laboratory contact hours per semester. Entrance into the POC is limited to qualified students desiring to compete for Air Force commissions. Enrollment in this program is based upon a cumulative GPA, physical qualifications and leadership potential.

Veterans with previous honorable, active, U.S. military service who wish to enroll in the POC may be eligible for a waiver of either the GMC or its equivalent as an entrance requirement. Veterans who meet all other requirements will be enrolled at the beginning of their junior year.

Uniforms and textbooks are provided at no charge to all students enrolled in AFROTC. Textbooks are returned upon completion of each academic year or upon withdrawal from the course. Uniforms are returned upon withdrawal from the course.

FINANCIAL ASSISTANCE

Students who demonstrate academic and leadership potential may be selected by the professor of aerospace studies to compete for scholarships. These scholarships are for three or two years, and are awarded in all majors. The scholarship award includes tuition, textbook allowance, some course fees and a monthly tax-free stipend.

Incentive Scholarship Program

Air Force ROTC students in the General Military Course (specifically sophomores) are eligible for \$1,500 per year for tuition, and a \$300-per-month stipend. Students enrolled in the Professional Officer Course (juniors and seniors) who are not already on scholar-ship are eligible for \$1,500-per-semester tuition scholarships, \$225 per semester for books, plus a \$350-\$400-per-month stipend. This award is limited to four total semesters (up to \$9,600) and cadets must be in good academic standing.

Scholarship Statement of Understanding

Air Force ROTC scholarship recipients must meet and maintain certain academic and military retention standards and serve in the active-duty Air Force after graduation.

CONTACT INFORMATION

For further information, contact the Department of Aerospace Studies, AFROTC DET 630, 104 Terrace Hall, Kent State University, Kent, OH 44242 at (330) 672-2182 or e-mail afrotc@kent.edu.



ARMY RESERVE OFFICER TRAINING CORPS (ARMY ROTC) Overview

Kent State University's tradition of Army ROTC began in 1947, and more than 1,100 students have been commissioned as officers in the U.S. Army. Army ROTC falls under the military science course heading and offers a two- to four-year course of study that adds practical leadership and management training and leadership experience to students' chosen academic degree. All students, undergraduate and graduate, are eligible to participate in the Army ROTC program.

Students whose career goals require leadership or managerial skills, those with an interest in the national defense structure and role of the military in society, or those students wishing to explore the financial benefits of the ROTC program and the Army are encouraged to enroll in the introductory lower-division military science courses. These courses can be applied as elective credit toward most undergraduate degrees. Enrolling in military science courses follows the same procedure as other university courses. Participation is voluntary and requires no military obligation.

CURRICULUM

The military science curriculum is unified by the study of leadership, discipline and personnel management. Students will study leadership theory and dynamics through case studies, Army doctrine, military history and practical exercises. The program is divided into two segments: the Basic Course and the Advanced Course.

Basic Course

The Basic Course introduces students to the role of the military in our society, the fundamentals and dynamics of leadership and management, and the practical application of these fundamentals. There is <u>no military obligation</u> for enrolling in any of the Basic Course classes, and all undergraduates are eligible to enroll. Freshmen are encouraged to enroll in MSCI 10180 and MSCI 10185 with the accompanying leadership lab MSCI 10190. Sophomores are encouraged to contact the program's enrollment officer for guidance on military science placement. Students who have prior military service through active or reserve components can receive basic course.

Advanced Course

The Advanced Course enhances the preparation of the professional officer. The advanced military science courses are open to both undergraduate and graduate students who have completed the Basic Course requirements. These upper-division courses involve military leadership, Army logistics, personnel management principles, ethics and military law. An additional 32-day summer practicum allows students to put into practice all their learned skills while being constantly evaluated on their leadership abilities.

FINANCIAL ASSISTANCE PROGRAMS Scholarships

Students who demonstrate academic and leadership potential may apply for Army ROTC four-, three- and two-year scholarships. The scholarship pays tuition and fees (excluding flight fees) up to \$9,000; \$250-, \$300-, \$350- or \$400-per-month tax-free grant and \$600-per-year book allowance. Two- and three-year scholarship applications are available only on campus and are under the immediate control of the Army ROTC program. Currently, Kent State's Army ROTC program has several scholarships to award in each academic year. Applications are taken year-round, and awards are given during spring semester. Scholarship eligibility criteria include: college GPA, ACT/SAT results (three-year applicants only), extracurricular activities and work, an interview and review board. Four-year scholarship applications are due by Nov. 15 of the students' senior year in high school. Those who are interested may contact our office, their local guidance counselor, or call (800) USA-ROTC for an application. All scholarships are awarded based on merit rather than need and on-campus scholarships are on a first-come basis. All academic majors are eligible to apply.

University Incentives

For students interested in participating or are currently enrolled, Kent State University has given our ROTC program 16 dormitory room incentives and \$12,500 to use toward discretionary scholarships. These incentive scholarships are awarded annually to scholarship students in our program.

OTHER PROGRAMS AND INFORMATION

Simultaneous Membership Program

Members of the Army National Guard or Army Reserves or students who have completed the ROTC Basic Course are eligible to participate in the Simultaneous Membership Program (SMP). SMP students serve as officer trainees in a local National Guard or Reserve unit while attending full time at Kent State University and taking military science classes. Upon graduation and completion of the ROTC program, SMP students will receive a commission as a second lieutenant in the National Guard or Reserves, or go on active duty. In addition to becoming officers, students will receive all eligible financial benefits of the National Guard or Reserves (i.e., 100 percent tuition, GI Bill with more than \$2,000, up to \$10,000 in student loan repayment, and annual part-time pay of more than \$2,800) and \$250 per month for ROTC. All students currently participating in a National Guard or Reserve program while attending Kent State University should look into the Army ROTC program. Service time while in school counts toward your military commitment.

Military Studies

Students who have not taken the Basic Course classes but wish to pursue a commission and receive some financial benefits of the ROTC program can attend a 35-day summer camp in lieu of the two-year Basic Course. Leader's Training Course (LTC) teaches the skills required to complete the on-campus program and, additionally, offers students practical leadership experience by performing as cadet leaders throughout the camp. LTC is challenging, both mentally and physically. Upon completion, students are eligible for placement in the Advanced Course, two-year scholarship benefits and entrance into the SMP program (see above). In addition to LTC, there are other "Alternative Entry Options" to begin your ROTC Advanced Course program—contact us.

Career Opportunities

The Army has 25 branches with literally hundreds of job descriptions for newly commissioned officers. Areas such as communications, finance, military intelligence, Corps of Engineers, military police, nursing, etc., offer the new officer a variety of career options. A second lieutenant going on active duty (as of 2002) starts out at more than \$33,000 and exceeds \$46,000 within four years of service. Additional benefits include: full retirement after 20 years of service, 30 days of paid vacation, 100 percent medical and dental coverage, and \$250,000 worth of life insurance. A commission into a reserve component brings earnings ranging from \$3,500 and \$4,500 annually for 39 days of duty. Whether the Army is a career aspiration or a résumé-building first job, the opportunities are limitless.

Departmental Programs

Students may elect to participate in activities beyond their course of study. Adventure activities such as mountaineering, rappelling, rifle marksmanship, physical conditioning and land navigation are examples of other programs complementing the military science study. Airborne and Air Assault School training also is available to qualifying students.

ROTC offers a drill team/color guard that trains and performs at university functions as well as community service events. Members do not need to enroll in ROTC to participate.

The ROTC Cadet Ranger team is a training-oriented student group emphasizing leadership experiences, group dynamics and advanced military skills. Team members compete in regional competitions against other university programs.

Miscellaneous

The following are some final highlights of the Army ROTC program.

- Nursing students are encouraged to consider ROTC. There are nursing scholarships available, and recipients are guaranteed a nursing position after graduation.
- U.S. Army Specialty slots to Airborne School, Air Assault School, Northern Warfare School, Survival Training and others are available annually to enrolled student-cadets.
- We provide textbooks and uniforms. All materials needed for our courses are provided by the Department of Military Science.
- Students who enter active military service after graduation may defer payment of national direct student loans or nursing student loans for up to three years.
- The Department of Military Science also offers the cadets "staff rides," trips to historic sites where military campaigns and history are studied. Staff rides include the cost of transportation and lodging. Past trips included sites such as Niagara Falls, Canada and Gettysburg.

Contacts and Information

The Army ROTC staff at Kent State University is available yearround to provide additional information or answer questions concerning these academic programs, scholarship opportunities and enrollment requirements. The office is located in 106 Terrace Hall on the university's Kent Front Campus and can be reached by telephone at (330) 672-2769, fax (330) 672-3690 or on the Web at www.kent.edu/rotc.

SERVICE-MEMBERS OPPORTUNITY COLLEGES

Kent State University is a member of Service-Members Opportunity Colleges, a consortium of over 1300 institutions pledged to be reasonable in working with service members and veterans trying to earn degrees even while pursuing demanding, transient careers. As a SOC member, we are committed to easing the transfer of relevant course credits, providing flexible academic residency requirements, and credit learning from appropriate military training and work experiences. SOC is sponsored by 15 national higher education associations with the military services, the National Guard bureau and the Office of the Secretary of Defense serving as cooperating agencies.

COMBINED BACCALAUREATE AND MASTER'S PROGRAM

Persons with outstanding undergraduate records or exemplary professional credentials may be eligible for one of the following enrollments in a combined baccalaureate and master's program:

- A Combined Baccalaureate/Master's for Degree Students Early In Their Undergraduate Studies Students who have achieved a GPA of 3.50 after 60 semester hours 3.40 after 75 semester hours 3.30 after 90 semester hours or 3.20 after 105 semester hours may apply for early admission to a master's degree program by:
 - A. Completing the Application for Admission.
 - B. Completing the Combined Baccalaureate and Master's Program form, which includes:
 - 1. Listing the courses at the undergraduate level that need to be taken for the baccalaureate degree.
 - 2. The beginning date for graduate study.
 - 3. Listing of graduate courses to be utilized in satisfying the undergraduate degree. (In participating departments/schools, students may apply up to 12 of their accumulated graduate hours toward the completion of their undergraduate degree requirements as well. The students' undergraduate department will determine the undergraduate coursework for which graduate credits may be substituted.) In some departments graduate coursework may be substituted only for elective undergraduate coursework and cannot be used as substitution within the major. (Please check with the graduate coordinator in your individual department.) The selection of the graduate coursework and the number of credits to be applied toward an undergraduate degree requires the approval of the graduate chair in the students' academic department and the appropriate undergraduate and graduate deans.
 - C. Providing three letters of recommendation from the instructors who are familiar with the students' achievements and intended academic goals.
 - D. Submitting any needed test scores from standardized examinations.
- II. Combined Baccalaureate/Master's Program for Specified Professional Programs
 - A. <u>Combined Baccalaureate/Master's Degree Program in</u> <u>Speech Pathology and Audiology Leading to Clinical Certi-</u> <u>fication</u>

Students who have earned 90 semester hours and achieved a minimum GPA of 3.00 may, with approval of the School of Speech Pathology and Audiology, apply for admission to the combined program. Admission will be based upon satisfactory GRE scores, three letters of recommendation and completion of the Application for Admission and Combined Baccalaureate and Master's Program forms.

B. <u>The Combined Baccalaureate/Master's Program in the</u> <u>School of Architecture and Environmental Design Leading</u> <u>to the Bachelor of Architecture and Master of Architecture</u> <u>Degrees</u>

Students who have earned 105 semester hours and achieved a minimum GPA of 3.00 may, with approval of the School of Architecture, apply for admission to the combined program. Admission will be based upon satisfactory portfolio review, three letters of recommendation and completion of the Application for Admission and Combined Baccalaureate and Master's Program forms. Students who have completed a Bachelor of Science in Architecture elsewhere, with a minimum GPA of 3.00, and have been accepted into the Bachelor of Architecture program at Kent State University may apply for the combined program. Students may apply up to 10 hours of specific graduate credit to the Bachelor of Architecture degree program.

C. <u>Combined Baccalaureate/Master's Program in the College</u> of Business Administration

Students must have earned 90 semester hours to apply for the Combined Baccalaureate/Master's Program in the College of Business Administration. In addition, they must meet the GPA requirements outlined under Item I.

D. Combined Baccalaureate/Master's Program in the Center for International and Comparative Programs and the Graduate School of Management Leading to the Bachelor of Arts and Master of Business Administration Degrees Students must be an international relations major and complete their major in the first three years of study. In addition, students must pass a language proficiency exam, have a cumulative GPA of 3.30 and earn a minimum GMAT score of 525 before being admitted to the M.B.A. program. In the fourth year of this combined program, students take graduate business courses that are applicable to the undergraduate degree as electives and to the M.B.A. degree as foundation coursework. During the final year, students take advanced graduate business coursework leading to the M.B.A. degree.

E. <u>The Combined Bachelor of Science/Master of Arts Degrees</u> in Visual Communication Design

This is a five-year degree program with optional concentrations in 2D graphic design, 3D graphic design and illustration. Students who pass the junior portfolio review, complete a minimum of 90 semester hours, demonstrate excellence in formal organization and conceptual problemsolving abilities and technical skills and maintain a minimum 3.00 overall GPA and a 3.25 in the major will be invited or may petition to enter this program. An overall GPA of 3.00 and a major GPA of 3.00 in both the bachelor's and master's programs will be required for graduation.

III. A Nontraditional Master's Degree Student

In rare instances, persons who have not completed a baccalaureate degree will be considered for admission to the appropriate graduate unit due to unusual and exemplary experiential learning. Such applicants may apply for admission by presenting for departmental consideration a curricular plan encompassing undergraduate and graduate coursework to achieve a liberal educational background and professional graduate degree and three letters of recommendation attesting to their potential for graduate study. Upon departmental recommendation and the approval of the dean of the appropriate graduate work. Upon successful completion of the curricular plan and the particular master's degree requirements, the students will be awarded the master's degree.





THE COLLEGE OF CONTINUING STUDIES

204 Michael Schwartz Center (330) 672-3237 http://ccs.kent.edu

383

COLLEGE OF CONTINUING STUDIES

The College of Continuing Studies, in cooperation with academic units, sponsors quality, nontraditional academic programs. The College of Continuing Studies includes Evening and Weekend programs, Gerontology Center, the Division of Lifelong Learning, Office of Public Service and Outreach and Summer Sessions. Visit our Web site for details: http://kentstatecontinuinged.com.

EVENING AND WEEKEND PROGRAMS

Evening and Weekend programs are for people who find the traditional daytime schedule of classes inaccessible. Most evening and weekend students are adults employed full time or part time and have additional family responsibilities. Evening and weekend programs permit students to complete requirements for a limited number of undergraduate degrees.

Majors offered in the evening and weekend include: accounting, advertising, business management, computer science (applied math), justice studies, economics, English, finance, general studies, gerontology, history, hospitality food service management, information systems, individual and family studies, interior design, news, operations management, marketing, psychology, public relations, rhetoric and communication, technology and visual communication design.

If you are an adult student interested in attending the evening and weekend programs, please contact the Office of Adult Services, (330) 672-7933.

GERONTOLOGY CENTER

The Gerontology Center serves as a resource to the community regarding issues, concerns and needs of the senior adult population. Through the collaborative efforts of the Office of Public Service and Outreach in the College of Continuing Studies, the School of Family and Consumer Studies and various professors with an interest in gerontological studies, the center is able to provide a variety of learning opportunities to the senior population, as well as to students and professionals in the field of aging. For more information about the Gerontology Center call (330) 672-2002 or visit our Web site: http://ccs.kent.edu/Geron1/GC.html.

LIFELONG LEARNING

The Division of Lifelong Learning administers both credit and noncredit programs to meet lifelong learning needs of the university and the professional community. In addition, for students enrolled at the Kent Campus for at least 11 and not more than 18 credit hours during fall or spring semester (including workshop credit hours), the tuition portion of the credit workshop fee is included in the full-time fees for the semester. All credit workshops are graded satisfactory/unsatisfactory (S/U). In cooperation with other academic and service units at the university, the Division of Lifelong Learning offers credit workshops, conferences, noncredit courses and seminars for professionals in business, education, health care and other fields. In partnership with the College of Business Administration, the division provides customized training and consulting to organizations through the Center for Executive Education and Development. To receive additional information, contact the College of Continuing Studies, 204 Michael Schwartz Center, (330) 672-3237, or visit our Web site: http://kentstatecontinuinged.com.

PUBLIC SERVICE AND OUTREACH

The Office of Public Service and Outreach develops, manages and cosponsors learning opportunities for the enrichment of special target populations and community development. The Summer Youth Program and Intensive English as a Second Language programs are among these opportunities. To receive additional information, contact the College of Continuing Studies, 204 Michael Schwartz Center, (330) 672-3237, or visit our Web site: http://kentstatecontinuinged.com.

SUMMER SESSIONS

Educational opportunities for all students are available through Kent State University's comprehensive summer sessions. Summer on the beautiful Kent Campus is a special time of growth and development for many students. The trees, the carefully tended flower beds and air-conditioned classrooms, combined with an outstanding program of more than 1,500 course offerings, make Kent State an ideal place for students to expand their horizons under the most favorable conditions.

Summer sessions at Kent State University begin in May with a three-week intensive intersession and continue with two consecutive five-week terms and an overlapping eight-week term. Daytime and evening courses are included. A variety of workshops, both credit and noncredit, are available in addition to regular credit classes.

To obtain a summer schedule booklet, contact the Office of Summer Sessions, 204 Michael Schwartz Center, (330) 672-3233 after March 1; you may FAX a request to (330) 672-2079, e-mail Gloria@ccs.kent.edu or visit our Web site at http://kentstatecontinuinged.com.