

EVENING PROGRAM CERTIFICATE IN FABRICATION AND WELDING

The evening program curriculum for Fabrication and Welding includes oxy-fuel cutting, Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW), Flux Cored Arc Welding (FCAW). The theory for each of these processes is discussed along with proper joint design and proper welding techniques.

For students interested in furthering their education, these courses are creditable toward our Associate of Applied Science (AAS) and Bachelor of Science in Applied Management (BSAM) degrees. Please see our AAS and BSAM evening program offerings on page 90.

PROGRAM COURSES		Hours	Prerequisites
FWL0110	Welding I	6	
FWL0120	Welding II	6	FWL0110 (Co. Req.)
Above two courses are required plus one of the following:			
FWL0231	Advanced Gas Tungsten Arc Welding (GTAW/TIG)	6	FWL0110
FWL0230	Advanced Shielded Metal Arc Welding (SMAW/Stick)	6	FWL0110, FWL0120
FWL0121	Advanced Gas Metal Arc Welding (GMAW/MIG) and Flux Cored Arc Welding (FCAW)	6	FWL0110
FWL0111	Welding Inspection and Print Reading	6	
FWL0122	Structural Fabrication	6	FWL0110
FWL0123	Chassis Fabrication	6	FWL0110
FWL0112	CNC Cutting/Blueprint Reading	6	
Total Technical Credit Hours for Certificate Completion		18	

COURSE DESCRIPTIONS

FWL0110 WELDING I

Students will learn the necessary skills for welding and cutting processes used in the welding and fabrication industry. Processes covered in this program include, Shield Metal Arc Welding (SMAW/Stick) welding, Flux Cored Arc Welding (FCAW), Gas Metal Arc Welding (GMAW) and Gas Tungsten Arc Welding (GTAW), to be applied on various metals. The emphasis is to develop proper welding techniques in the flat and horizontal positions. The procedures for preparing materials – oxy-fuel cutting and carbon arc gouging – are included in the curriculum. Six credit hours.

FWL0120 WELDING II

Focuses on the skills required to perform welds in various positions. Students will be prepared for the AWS certification test in vertical Shield Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW) and Flux Cored Arc Welding (FCAW) on steel plate. Six credit hours.

FWL0231 ADVANCED GAS TUNGSTEN ARC WELDING (GTAW/TIG)

Covers Advanced Gas Tungsten Arc Welding (GTAW/TIG) welding processes by using mild steel, stainless steel and aluminum in all positions. Students will also learn to weld on pipe using the GTAW/TIG process. Six credit hours.

FWL0230 ADVANCED SHIELDED METAL ARC WELDING (SMAW/STICK)

Focuses on the skills for stick welding mild steel pipe in various positions. Students will be prepared to receive a certification in pipe welding. Six credit hours.

FWL0121 ADVANCED GAS METAL ARC WELDING (GMAW/MIG) AND FLUX CORED ARC WELDING (FCAW)

Develop advanced skills in the Gas Metal Arc Welding (GMAW) and Flux Cored Arc Welding (FCAW) processes. Students will learn to weld by completing projects, including pipe welding. Six credit hours.

FWL0111 WELDING INSPECTION AND PRINT READING

Offers an in-depth study of blueprint reading and the ability to interpret shop drawings. Students will be introduced to different types of welding inspection and inspection principles, as well as the metallurgy related to welding. Six credit hours.

FWL0122 STRUCTURAL FABRICATION

Focusing on fabricating and the cutting and welding of components in the structural steel fabrication field. Students will learn the necessary setup and operation of equipment used in the industry. They will also learn to fabricate parts by using blueprint formats. Six credit hours.

FWL0123 CHASSIS FABRICATION

This course focuses on the ability to cut, weld and fabricate components in the race car chassis field. Students will learn the setup and operation of equipment used in the industry. They will also learn to fabricate parts using blueprint formats. Six credit hours.

FWL0112 CNC CUTTING/BLEUPRINT READING

Covers the programming, set up and operation of a plasma cutting table. Students are also prepared in advanced blueprint reading and drawing interpretation. Six credit hours.



GENERAL EDUCATION AND DEGREE OPTIONS



GENERAL EDUCATION

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Consistent with the College's purpose and philosophy, the general education division of Ranken Technical College was designed to provide a foundation of general education to complement our students' technical education.

Ranken is committed to maintaining a strong general education division for several reasons:

1. General education courses provide the necessary mathematical, scientific and communication skills required to succeed in the students' major course of study and advance on the job.
2. General education courses help develop the ability to think critically, analyze information and solve problems.
3. Employers want to hire technically trained graduates who, in addition to possessing good technical skills, can communicate effectively, work well with others and adapt to new situations.

OUTCOMES ASSESSMENT OF STUDENT LEARNING

Outcomes assessment is a continuous, ongoing process of improvement in which each department at the College establishes its individual course and program objectives. At certain points in the program, a variety of assessment instruments are used to measure whether students have achieved the stated objectives. The results of these assessments are analyzed by each department to determine what improvements to student learning are necessary to achieve the desired outcomes.

By using outcomes assessment to improve student learning, the College is able to maintain its position as a leader in the field of providing excellence in technical education.

DEVELOPMENTAL STUDIES

The general education division offers developmental study courses in basic writing and basic mathematics. The Fundamentals of Composition, College Reading and Basic College Mathematics courses are designed to prepare students for instruction at the post-secondary level. Course requirement is determined by the College's placement tests.

NON-CREDIT DISTANCE LEARNING

Ranken has partnered with industry leaders in online education to offer excellent non-credit, distance learning options to potential students, current students and graduates.

Ranken's Distance Learning program offers a wide range of interactive courses that can be taken entirely over the Internet. All of the courses are led by experienced instructors, experts in their respective fields. Learning courses are offered at basic, intermediate and advanced levels. Students can take the opportunity to sharpen computer skills, learn a foreign language, web design, basic accounting, etc.

Short-term introductory courses last around six weeks, while career training courses can last between six months and one year. Courses are project-oriented and include lessons, quizzes, hands-on assignments, discussion areas, supplementary links and more. Complete any of these courses entirely from your home or office and at any time of the day or night.

Course categories include:

- Sustainable Energy and Going Green
- Business and Professional
- Management and Corporate
- General Education
- Media and Design
- IT and Software Development/Basic Computer Literacy
- Many more options are available

These classes are offered on a non-credit basis and will not be reflected on a Ranken transcript. To see a full listing, visit our website at www.ranken.edu.

ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science degree (AAS) is designed for the adult working in the technical field who wishes to apply their technical training and work experience towards a college degree.

Students who possess either a certificate from Ranken, a certificate from another accredited technical training program, or equivalent work experience can use that training for college credit towards their associate degree at Ranken.

Training programs from other institutions and work experience will be evaluated by the Registrar's office.

Once the technical training aspects are met, students will then focus on completing the general education courses – and could graduate with an associate degree in as little as two short years. Geared towards the working adult, classes are conveniently offered in the evening and online.

Graduates of the AAS degree program will not only possess the technical skills to advance on the job but will also have the communication and critical thinking skills necessary to further their career. Graduates will also have the opportunity to continue their education further and apply their associate degree towards a bachelor's degree.

PROGRAM COURSES			Hours	Prerequisites
Technical Training	RTC2500	Ranken Technical College Credits	30	
Communications/English				
	ENG1101	College Composition 1	3	
	ENG2102	College Composition 2	3	
	COM1105	Oral Communications	3	
Select One of the Following Electives:				
	SOC1206	Sociology	3	
	PSY1206	Psychology	3	
Select One of the Following Electives:				
	COM3000	Intercultural Communications	3	
	COM3100	Organizational Communications	3	
Select One of the Following Electives:				
	ART3002	Freehand Drawing	3	
	FNA3100	Fine Arts in Context	3	
	POL3208	American Government	3	
	HIS1211	Western Civilization	3	
Mathematics and Science				
	MTH1111	Intermediate Algebra or higher	3	
	PHY2100	Conceptual Physics or higher	3	
Business and Information Technology				
	CIT1110	Computer Literacy	2	
	WFD1200	Job Search Success	1	
Select One of the Following Electives:				
	MNG1204	Introduction to Business Management	3	
	ECO3205	Macroeconomics	3	
	Total Credit Hours Required		60	
Important Note: Only courses in which a grade of "C" or higher is earned may be applied toward this Ranken degree.				

CERTIFICATE OF APPLIED MANAGEMENT

The Certificate of Applied Management is comprised of the most essential business courses available to teach a student the necessary skills to succeed. Designed for the working adult, the Certificate of Applied Management courses are offered as either evening or online courses, or a combination of both. Students will learn real-world business applications with the convenience of a flexible schedule.

The program is offered in two levels. Level I is the foundation for all general business operations. Once the student has a better business understanding, he or she will be prepared to continue on to Level II, which focuses on management skills. Once both levels have been completed, the student will be prepared for a corporate environment. They will have a good foundation to continue their education and obtain a bachelor's degree.

LEVEL I PROGRAM - GENERAL BUSINESS EMPHASIS			Hours	Prerequisites
	CIT1100	Computer Literacy	2	
	ENG1101	College Composition I	3	
	ENG2102	College Composition II	3	
	MNG1204	Introduction to Business and Management	3	
	SOC1206	Principles of Sociology or	3	
	PSY1206	Introduction to Psychology	3	
	COM3100	Organizational Communications	3	
	MNG3100	Management and Supervision	3	
	PSY3100	Organizational Behavior	3	
	Total Credit Hours Eequired		23	
LEVEL II PROGRAM - MANAGEMENT EMPHASIS			Hours	Prerequisites
	MNG4110	Production and Operation Management	3	
	PSY4000	Organizational Psychology	3	
	MNG3200	Human Resource Management	3	
	Total Credit Hours Required		9	

Upon completion of an associate degree or two-year certificate from Ranken, or another accredited technical training program, students are eligible for the Bachelor of Science in Applied Management (BSAM) program – and could graduate with a bachelor's degree in as little as two short years. Flexible evening courses throughout the year are specifically designed to accommodate the needs of the working adult.

Geared towards Ranken graduates who wish to advance in their chosen careers and industries, the BSAM offers a unique educational blend designed to transform highly-skilled technicians into successful managers. The program combines Ranken's top-quality technical education with managerial and business courses, as well as the communications and marketing skills needed to be competitive in the 21st century. Students who graduate with a Bachelor of Science in Applied Management will have opportunities for greater career advancement and financial rewards.

Ranken's BSAM program offers flexibility in designing a career that's right for you. The following track options allow students to graduate with an emphasis in one of the following areas:

- **Management Emphasis**
Offering additional business courses, the management emphasis is intended for individuals who wish to advance into management or supervisory positions. Students will learn the process of accomplishing the goals of an organization through the effective use of people and resources.

- **Management Information Systems (MIS) Emphasis**
An MIS emphasis enables information technology graduates to plan all aspects of an information system and ensure that projects are implemented within budget in a timely way. The MIS track is designed for individuals wishing to advance in their careers as successful managers or directors of their organization's information systems department.

- **Marketing Emphasis**
This specialization focuses on fundamentals of sales and marketing management. In addition to marketing expertise, students will learn to demonstrate necessary management, interpersonal and professional thinking skills to impact organizational effectiveness at all levels of their company. Students will complete a competitive analysis, designed to place their business at an advantage in the marketplace. Graduates will be qualified for jobs as technical and sales specialists or product and brand managers in manufacturing and service industries.

Like all Ranken programs, the BSAM program is not just an education; it's on-the-job-training that companies respect and look for when hiring.

The BSAM curriculum consists of the following six clusters along with general education:

- Management Cluster
- Human Resource Management Cluster
- Quality Control Cluster
- Business Finance Cluster
- Marketing Cluster
- MIS Cluster (for MIS track only)
- Final Cluster

MANAGEMENT PROGRAM COURSES		Hours
Technical Training		
RTC2500	Ranken Technical College Credits	24 to 40
or		
TEC2500	Technical Education College Credits	1 to 40
and		
WEC2500	Technical Portfolio Assessment	3
Management Cluster		
COM3100	Organizational Communications	3
FNA3100	Fine Arts in Context	3
MNG3100	Management and Supervision	3
PSY3100	Organizational Behavior	3
Human Resources Cluster		
MNG3200	Human Resource Management	3
MNG3250	Employment Law	3
MTH3113	Statistical Analysis	3
Business Finance Cluster		
COM3000	Intercultural Communications	3
MNG3300	Managerial Accounting	3
MNG3350	Principles of Finance	3
Quality Control Cluster		
MNG4110	Production and Operation Management	3
MNG4150	Project Management	3
PSY4000	Organizational Psychology	3
Marketing Cluster		
MNG4020	Global Business Strategy	3
MNG4200	Principles of Marketing	3
MNG4250	Small Business Management	3
MNG4400	Business Strategy and Implementation	3
Final Cluster		
ECO3205	Macroeconomics	3
MNG4300	Management of Information Systems	3
MNG4500	Capstone Project (Management Emphasis)	3
POL3208	American Government	3

MIS PROGRAM COURSES		Hours
Technical Training		
RTC2500	Ranken Technical College Credits	24 to 40
or		
TEC2500	Technical Education College Credits	1 to 40
and		
WEC2500	Technical Portfolio Assessment	3
Management Cluster		
COM3100	Organizational Communications	3
MNG4300	Management of Information Systems	3
MNG3100	Management and Supervision	3
PSY3100	Organizational Behavior	3
Human Resources Cluster		
MNG3200	Human Resource Management	3
MNG3250	Employment Law	3
MTH3113	Statistical Analysis	3
Business Finance/Marketing Cluster		
MNG4200	Principles of Marketing	3
MNG3300	Managerial Accounting	3
MNG3350	Principles of Finance	3
Quality Control Cluster		
MNG4110	Production and Operation Management	3
MNG4150	Project Management	3
PSY4000	Organizational Psychology	3
MNG4020	Global Business Strategy	3
MIS Cluster		
MNG4230	Modern System Analysis and Design	3
MNG4231	Business Networks and Telecommunications	3
MNG4232	Modern Database Management	3
Final Cluster		
ECO3205	Macroeconomics	3
MNG4320	Enterprise Resource Planning (ERP)	3
MNG4500	Capstone Project (IT Emphasis)	3
POL3208	American Government	3

Automotive Division

Construction Division

Electrical Division

Information Technology Division

Manufacturing Division

General Education and Degree Options

MARKETING PROGRAM COURSES

Hours		
Technical Training		
RTC2500	Ranken Technical College Credits	24 to 40
or		
TEC2500	Technical Education College Credits	1 to 40
and		
WEC2500	Technical Portfolio Assessment	3
Management Cluster		
COM3100	Organizational Communications	3
MNG4200	Principles of Marketing	3
MNG3100	Management and Supervision	3
PSY3100	Organizational Behavior	3
Human Resources Cluster		
MNG3200	Human Resource Management	3
MNG3250	Employment Law	3
MTH3113	Statistical Analysis	3
Business Finance Cluster		
COM3000	Intercultural Communications	3
MNG3300	Managerial Accounting	3
MNG3350	Principles of Finance	3
Quality Control Cluster		
MNG4110	Production and Operation Management	3
MNG4150	Project Management	3
PSY4000	Organizational Psychology	3
MNG4020	Global Business Strategy	3
Marketing Cluster		
MNG4220	Advertising	3
MNG4221	Sales Management	3
MNG4225	Marketing Strategies	3
Final Cluster		
EC03205	Macroeconomics	3
MNG4300	Management of Information Systems	3
MNG4500	Capstone Project (Marketing Emphasis)	3
POL3208	American Government	3

GENERAL EDUCATION COURSES

Prerequisites		Hours
Business and Information Technology		
CIT1100	Computer Literacy	2
MNG1204	Intro to Business and Management	3
WFD1200	Job Search Success	1
English, Social Sciences and Communications		
COM1105	Oral Communications	3
ENG1101	College Composition 1	3
ENG2102	College Composition 2	3
SOC1206	Sociology or Psychology	3
Mathematics		
MTH1111	Intermediate Algebra	3
Program Requirement Total Credit Hours		124
Outside of the technical training, a minimum of 30 credit hours must be earned from Ranken Technical College.		
Important Note: Only courses in which a grade of "C" or higher is earned may be applied toward this Ranken degree.		

Ranken is introducing a new three year program to provide students with more educational options. Ranken's Bachelor of Science in Applied Management (BSAM) degree is geared toward technical students who wish to advance in their chosen technical career. Ranken provides three BSAM track options: Management, Management Information Systems (MIS) and Marketing.

The accelerated program offers a unique educational blend, designed to transform highly-skilled technicians into successful managers. The current BSAM program has been successfully offered as an evening program, typically taken after an associate degree has been acquired.

YEAR 1

Fall - First Semester

TECH	Technical Major Courses
ENG1101	Composition I
MTH1110	Elementary Algebra

Spring - Second Semester

TECH	Technical Major Courses
CIT1100	Computer Literacy
ENG2102	Composition II

Summer - Third Semester

COM1105	Oral Communications
MTH1111	Intermediate Algebra
MNG1204	Introduction to Business and Management
COM3100	Organizational Communications

YEAR 2

Fall - First Semester

TECH	Technical Major Courses
PHY2100	Conceptual Physics
SOC1206	Principles of Sociology
MNG3100	Management and Supervision

Spring - Second Semester

TECH	Technical Major Courses
FNA3100	Fine Arts
COM3000	Intercultural Communication
PSY3100	Organizational Behavior

Summer - Third Semester

MNG3200	Human Resource Management
MNG3250	Employment Law
MTH3113	Statistics
MNG4250	Small Business Management

Now, it can be taken as an intensive three year program, allowing graduates to get into the field and advance in their careers quickly!

Students begin their two year technical program and as they complete their general education classes, they can start taking management courses immediately. This, enables students to complete both their associate and bachelor's degrees in three short years.

Below is a sample schedule that a Management student could maintain. Some courses may be transferable, tested out and/or exchanged for other classes:

YEAR 3

Fall - First Semester

MNG4020	Global Business Strategy
MNG3300	Accounting
MNG4150	Project Management
PSY4000	Organizational Psychology

Spring - Second Semester

MNG3350	Principles of Finance
MNG4400	Business Strategy and Implementation
MNG4200	Marketing
MNG4110	Production and Operations Management

Summer - Third Semester

EC03205	Macroeconomics
POL3208	American Government
MNG4300	Management Information Systems
MNG4500	Capstone

ENGLISH AND SOCIAL SCIENCES

ART3002 FREEHAND DRAWING

Exercises concerned with perception and rendering of form, space and light to develop the graphic means to express architectural concepts clearly and economically. Students explore architectural representation through a series of in-the-field drawing sessions at locations around the St. Louis area. Subjects include architecture, landscape, plant materials, reflections and streetscape. Fundamentals of perspective, line, tone and color will be explored. Three credit hours.

COM1080 TECHNICAL COMMUNICATIONS

This is a specialized course in technical communications, emphasizing the vocational aspects of reading, writing, listening and speaking. Students will receive practice in writing essays and preparing business correspondence such as letters and resumes. Each student will also be required to develop a competency in speaking before small groups. This course is intended for certificate program students. Credit may not be applied toward the associate of technology degree. Three credit hours.

COM1105 ORAL COMMUNICATIONS

This course offers an opportunity to explore effective one-to-one, small group and large group communication processes. Emphasis will be placed on a theoretical/conceptual approach, as well as on skill development and application of concepts to various communication settings. Three credit hours.

COM3000 INTERCULTURAL COMMUNICATIONS

This survey course allows students to examine the complex relationship between culture and communication from several conceptual perspectives. As reflective practitioners, students will learn theories and will engage in activities that will allow them to acknowledge, appreciate and articulate the tensions involved in complex intercultural interactions. Three credit hours.

COM3100 ORGANIZATIONAL COMMUNICATIONS

Studies the communications within organizations, including relevant theories and technologies. Course includes both written and oral communications in business; effective organization and writing of correspondence, memoranda, reports and research proposals; and creating and presenting oral presentations. Three credit hours.

ENG1098 COLLEGE READING

This course is designed to help students become lifetime readers where students gain knowledge from reading, comprehend passages, apply information, analyze, synthesize and evaluate what they read. Students will use a variety of reading materials including textbooks, newspapers, novels, essays and Web sites. Three credit hours.

ENG1099 FUNDAMENTALS OF COMPOSITION

This developmental course is designed primarily to help prepare students for success in College Composition I. The course focuses on fundamental writing skills through extensive construction of sentences and paragraphs. Grammar, punctuation and spelling rules are emphasized, along with structure, unity and coherence in paragraph development. Three credit hours.

ENG1101 COLLEGE COMPOSITION I (AVAILABLE ONLINE)

An English composition course designed to develop the student's ability to organize, draft, revise and evaluate expository forms of writing. Students are given extensive practice in developing expressive, informative and persuasive essays. Pre-writing techniques and editing are emphasized. Three credit hours.

ENG2102 COLLEGE COMPOSITION II (AVAILABLE ONLINE)

This course further utilizes rhetorical principles gained from ENG1101. It includes methods of research for writing a documented research paper. Prerequisite: ENG1101. Three credit hours.

ETH3000 CONTEMPORARY ETHICS (AVAILABLE ONLINE)

This course allows students to inquire into the process of deliberate and voluntary moral decisions, into the ways in which people assume responsibility for such decisions and into the formation of conscience and character. Alternative value systems will be evaluated along with a number of contemporary issues linked to abortion, business ethics, racism and civil disobedience. Three credit hours.

FNA3002 DIGITAL PHOTOGRAPHY

This course provides instruction in the basic concepts and applications of electronic imaging hardware and software. It will emphasize the importing and digital editing of photographic images in both black-and-white and color. Artistic expression and experimentation with image form, content and design will be encouraged. Images will be manipulated and enhanced in Adobe Photoshop. Three credit hours.

FNA3100 FINE ARTS IN CONTEXT

Through a series of hands-on art activities and in-context experiences, students will be encouraged to grow and develop as resources for the self, the family, the workplace and the community. General categories of experiences are listed here and some specific opportunities will be identified and scheduled during the course. All will be authentic, appropriate opportunities and require students to examine and reflect on the benefits and impact of art and art processes for the individual, the group and the community. Three credit hours.

HIS1211 WESTERN CIVILIZATION I (AVAILABLE ONLINE)

This course explores the development of characteristic ideas and institutions of Western culture from the origin of civilization in the ancient Near East to the beginning of the rapid social, political and intellectual transformation of Europe in the 18th century. Three credit hours.

POL3208 AMERICAN GOVERNMENT (AVAILABLE ONLINE)

Covers topics such as federalism, federal and state constitutions, political parties and elections at the national, state and local level, legislatures, governors, the judiciary, the structure of local governments, budgeting and service delivery. The course also deals with how federal, state and local laws impact businesses. Three credit hours.

PSY1206 INTRODUCTION TO PSYCHOLOGY (AVAILABLE ONLINE)

This course is an introduction to the scientific study of human behavior. It attempts to help students gain insights into their own and other's behavior. A variety of topics relating to psychological development will be covered. Three credit hours.

PSY3100 ORGANIZATIONAL BEHAVIOR

Covers the impact of individuals, groups, structures and environment on behavior within organizations. The primary focus is on people, what they do and how their behavior affects individual, group and organizational performance. The process of ethical decision making for the employee, manager and organization are also covered. Three credit hours.

PSY4000 ORGANIZATIONAL PSYCHOLOGY

Applies psychological methods to solve human problems in industry and business. Students study relationships between the individual worker and the work environment. Emphasis will be on application of the most influential theories. Topics will include organizational dynamics, motivating workers, job satisfaction, selecting and training employees and work group influences. Three credit hours.

SOC1206 PRINCIPLES OF SOCIOLOGY (AVAILABLE ONLINE)

This course will explore the aspects and variations of human social activity. Sociology, the scientific study of society, explains how groups, institutions and social movements shape our lives. Topics include stratification, status, cultural differences, sex and gender roles and the structure and influence of family, religion and politics. Particular attention will be given to current events and social issues. Three credit hours.

SOC4100 SURVEY OF RESEARCH METHODS

Students will first define what constitutes academic qualitative and quantitative research. Students will then identify and utilize the necessary tools for academic qualitative and quantitative research. Each student will articulate a research problem, write a review of related literature, plan a research design and write a formal research proposal. Three credit hours.

MATHEMATICS AND SCIENCE

MTH1099 BASIC COLLEGE MATHEMATICS

This is a pre-algebra course designed for students before they enter Elementary/Intermediate Algebra. Topics include: whole numbers, fractions, decimals, percents and an introduction to topics in algebra including signed numbers and equations. Three credit hours.

MTH1100 ELEMENTARY/INTERMEDIATE ALGEBRA (AVAILABLE ONLINE)

This course combines topics in elementary and intermediate algebra. Topics include real numbers, solving linear equations, inequalities and formulas, as well as applications of algebra, graphing linear equations, laws of exponents, polynomials, factoring and rational expressions. Prerequisite: placement exam. Three credit hours.

MTH1110 ELEMENTARY ALGEBRA (AVAILABLE ONLINE)

Topics include operations on real numbers, solving linear equations, operations on exponents and polynomials, factoring, graphing linear equations and applications of algebra. Prerequisite: placement exam. Three credit hours.

MTH1111 INTERMEDIATE ALGEBRA (AVAILABLE ONLINE)

Topics include rational and radical expressions and equations, the function concept, systems of linear equations, inequalities in one and two variables and applications of algebra. Prerequisite: MTH1110. Three credit hours.

MTH2112 COLLEGE ALGEBRA (AVAILABLE ONLINE)

This course continues with topics in algebra, including the quadratic formula, graphing linear equations and inequalities, the function concept, quadratic functions, roots of polynomial functions, exponential and logarithmic functions, systems of equations and inequalities. Prerequisite: MTH1111 or MTH1100. Three credit hours.

MTH2220 TRIGONOMETRY

This course involves the study of the trigonometric and inverse trigonometric functions, with emphasis on trigonometric identities and equations. Prerequisite: MTH2112. Three credit hours.

MTH2240 SURVEY OF CALCULUS

An introduction to differential and integral calculus, with applications to a variety of practical situations drawn from social, economic, life and applied physical sciences. Prerequisite: MTH2112. Three credit hours.

MTH3113 STATISTICAL ANALYSIS

This course will acquaint students with the mathematical concepts of statistical analysis. The course includes an introduction to the theory and applications of descriptive and inferential statistics including probability, random variables, expected values, probability distribution functions and hypothesis testing. Three credit hours.

PHY2100 CONCEPTUAL PHYSICS (AVAILABLE ONLINE)

A conceptual introduction to physics. Emphasis is on developing knowledge and understanding of basic physical principles. Topics covered include an overview of the nature of physics, describing motion, Newton's laws of motion, gravitation, mechanical energy, temperature and heat engines and the laws of thermodynamics. The behavior of fluids, wave motion, the nature of light and the structure of the atom also will be introduced. Co-requisite: MTH1110. Three credit hours.

PHY2230 COLLEGE PHYSICS

An algebra/trigonometry-based physics course that emphasizes problem-solving. The course is designed to develop mathematical and problem-solving skills by covering various topics in physics. Topics covered include motion in one and two dimensions, Newton's law, work and energy, momentum and collisions, circular motion and the law of gravity, statics, rotational dynamics and solids and fluids. Prerequisite: MTH2220. Three credit hours.

BUSINESS AND INFORMATION TECHNOLOGY

CIT1110 COMPUTER LITERACY (AVAILABLE ONLINE)

This course is designed to be a comprehensive overview of the computer. The student will be familiarized with the terminology of data processing and will examine how the computer can be a useful instrument in personal and professional life. Topics include computer basics, what it can and cannot do, how it operates, how it can be instructed to solve problems, as well as exposure to word processing, spreadsheet, database and operating system programs. The student will receive hands-on computer instruction in addition to class lectures. Two credit hours.

ECO3205 MACROECONOMICS (AVAILABLE ONLINE)

Covers economic activity and growth, determination of income, employment, output, inflation, aggregate supply and demand, money and banking, monetary and fiscal policies and international economic issues. Three credit hours.

MNG1204 INTRODUCTION TO BUSINESS AND MANAGEMENT (AVAILABLE ONLINE)

This course exposes students to the role of business and management theories and applications within organizations. Topics will include personal finance, capitalism, small business, forms of business ownership, leadership theories, management styles, e-commerce, business ethics, the impact of technology on business and globalization. The goal of this course will be accomplished through the use of lectures, case studies and the interactive business program www.mybizlab.com. Three credit hours.

WFD1200 JOB SEARCH SUCCESS (AVAILABLE ONLINE)

A web-blended course, that focuses on the fundamental tools and techniques to obtain a job. Students will create a resume, including references and an updated work history. Students explore interview techniques, gather information for cover letters as well as thank you letters and become knowledgeable in appropriate behaviors and attitudes for a successful job search. One credit hour.

MNG3100 MANAGEMENT AND SUPERVISION

Students study the concepts, terminology, principals, theory and issues in management as it relates to the supervisor in the workplace. Topics are organized around the four traditional functions of management: planning, organizing, leading and controlling. This course describes the evolution of management thought, the use of quantitative techniques to improve decision making and guidance for helping students build their management careers. Three credit hours.

MNG3200 HUMAN RESOURCE MANAGEMENT

Studies the processes and practices pertaining to organization and management of personnel including employee selection, development, motivation and evaluation. Emphasis will be on the management of human resources in service oriented organizations. Three credit hours.

MNG3250 EMPLOYMENT LAW

Covers the impact of law on the management of human resources in an organization will be the focus. This course will examine common law protections for the individual worker, including wrongful termination, employee privacy, wage and hour regulation, occupational safety, workers' compensation and employee benefits. Three credit hours.

MNG3300 MANAGERIAL ACCOUNTING

Emphasizes the use of accounting information for internal planning and control purposes. This course is intended for managers who will make business decisions using data obtained from the accounting system. The course will cover basic issues involved in using a cost accounting system. Three credit hours.

MNG3350 PRINCIPLES OF FINANCE

An introduction to the principles of financial management, this course will emphasize understanding the role of finance within a company. Topics covered include elements of financial planning, valuation, cost of capital investment and depreciation under various conditions. Three credit hours.

MNG4020 GLOBAL BUSINESS STRATEGY

This course covers international business operations and the impact of culture, global relations and management practices on domestic and foreign business organizations. Topics include international trade, investment, economics, culture, multi-cultural corporate management environment and other related topics. Three credit hours.

MNG4110 PRODUCTION AND OPERATION MANAGEMENT

This course of instruction in "Operations Management" is designed to provide the student with a holistic overview of Operations Management (Integrating Manufacturing and Services) and Lean concepts for improving processes. Major topic areas will include: 1) Operations Management (OM) in today's Business Environment; 2) Process Decisions; 3) Facility Decisions; 4) Aggregate planning and Inventory Decisions; 5) Daily Operations Decisions; and 6) Lean Concepts and Quality Tools for improving Processes. Three credit hours.

MNG4130 IT PROJECT MANAGEMENT FOR INFORMATION SYSTEMS

This course offers a comprehensive introduction to the design and implementation of computer based information systems. This course combines theory, practice and advice on the role of the project leader in managing the team, the individual and the task. Teaching students to plan all aspects of an IS project and to ensure that the project is implemented in a timely way and within budget is also covered. Three credit hours.

MNG4150 PROJECT MANAGEMENT

In this course, managers will become skilled in steering a project from inception to completion, while staying within the project budget. Three credit hours.

MNG4200 PRINCIPLES OF MARKETING

Introduces key concepts, methods of analysis, strategies and tactics which are critical to managing profitable customer relationships in today's domestic and foreign marketplaces. The course includes a study of product quality and branding, pricing, distribution and promotion. Three credit hours.

MNG4220 ADVERTISING

This course covers topics in advertising, promotion, planning, strategies, personal selling and media selection. Three credit hours.

MNG4221 SALES MANAGEMENT

This course covers topics in sales management, sales motivation, budgeting, forecasting, organizational structure, supervision, selection and recruitment, incentive and compensation plans. Three credit hours.

**COURSE DESCRIPTIONS –
BACHELOR OF SCIENCE IN APPLIED MANAGEMENT (CONTINUED)**

MNG4222 PRODUCT STRATEGY AND PRICE MANAGEMENT

This course covers topics in new product development to product elimination and also covers the entire product life cycle. The nature and practice of these processes are central to the firm's overall strategy for competitiveness and this course repeatedly emphasizes the fundamental relationship between the success of a product and the survival of the firm. Three credit hours.

MNG4225 MARKETING STRATEGIES

This course covers topics in strategic marketing in relation to the marketing mix, marketing communications, pricing strategies, distribution, product selection and other related topics. Three credit hours.

MNG4230 MODERN SYSTEM ANALYSIS AND DESIGN

This course presents a clear introduction to systems analysis and design. Examples and cases are drawn from actual systems projects, enabling students to learn in the context of solving real-world problems. Three credit hours.

MNG4231 BUSINESS DATA NETWORKS AND TELECOMMUNICATIONS

Covers fundamental business data communication concepts, beginning with an overview and the companies and government agencies involved in the field; the effects of communications on today's society; types of networks and security; the importance of wireless technologies; e-business applications; and the increased speed in communication services. Three credit hours.

MNG4232 MODERN DATABASE MANAGEMENT

This course begins by explaining why databases are used, how they improve on alternatives such as spreadsheets, what their components are and how they are developed. Next, it introduces the relational model and defines basic relational terminology. It contains a thoroughly revamped discussion of normalization, including a new four-step process that makes it far easier to understand and perform. This course is introducing statements for data definition and modification, as well as SQL SELECT statements. Next, it turns to database design and management, including the entity-relationship (E-R) model and basic data modeling. Three credit hours.

MNG4250 SMALL BUSINESS MANAGEMENT

Reviews the considerations faced by individuals planning to establish and manage a small business venture. Includes business planning, legal forms of ownership, financial planning and resources, tax considerations, insurance issues and basic considerations in operations and control. Three credit hours.

MNG4300 MANAGEMENT INFORMATION SYSTEMS

Provides students with the necessary knowledge and skills to make sound business decisions relating to information systems and to work with management to resolve problems in this area. Topics include how to develop and implement an information systems strategy. Three credit hours.

MNG4320 ENTERPRISE RESOURCE PLANNING (ERP)

This course covers the opportunities for increased productivity by bringing a company's many different systems together into one large integrated system. This complete introduction to the world of ERP provides the necessary background for success in today's marketplace. Three credit hours.

MNG4400 BUSINESS STRATEGY AND IMPLEMENTATION

The purpose of this course is to introduce the strategy diamond and the five elements framework and present the three major themes: (1) the dynamic nature of firms and industries; (2) strategy formulation and implementation inextricable connection; and (3) strategic leadership. This course focuses on how firms formulate, implement and evaluate strategies. Strategic-management concepts and techniques are studied. Three credit hours.

MNG4500 CAPSTONE PROJECT COURSE

This project-based course focuses on business strategy, in which students examine the steps for formulating strategies and how to evaluate decisions based on the performance of their firm. Students are required to utilize previous business knowledge by applying the concepts into a computer simulation. Strategic management policies and techniques will be studied, as well as case studies and presentations for demonstrating an understanding of business strategy and the implementation of business processes. Three credit hours.

Ranken Technical College seeks students who will succeed in benefit from and contribute to Ranken's educational programs and opportunities. Ranken Technical College accepts applications for most programs for both the fall and spring semesters. Contact the admissions office for specific program start dates.

The College operates on a rolling admission system. All credentials submitted for admission must be on file no later than one week prior to final registration for the semester in which the applicant wishes to begin.

The director of admissions welcomes enrollment inquiries from prospective students, high school and college counselors, and academic advisors.

All correspondence regarding applications for admission and all application credentials should be addressed to:

Admissions Office
Ranken Technical College
4431 Finney Avenue
St. Louis, Missouri 63113
Phone: (314) 286-4809
Fax: (314) 286-3309
admissions@ranken.edu

Ranken Technical College is a private, non-profit institution of higher education. Rich with history, Ranken has provided students with top quality educational programs for 100 years. Ranken Technical College's primary mission is to provide the comprehensive education and training necessary to prepare students for employment and advancement in a variety of technical fields. Throughout its long history as a St. Louis College and trade school, Ranken has been an excellent training and educational center for professionals looking to start or advance in their careers. Ranken Technical School's success in job placement is well-documented, with over 98 percent of Ranken graduates finding gainful employment in their chosen field within six months of graduation.

Ranken Technical College is accredited by The Higher Learning Commission and is a member of the North Central Association of Colleges and Schools.