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eastvalleyinstituteoftechnology

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www.evit.com

2011-2012 course catalog

East Valley Institute of Technology – EVIT

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2011-2012 Course Catalog

What is EVIT?

EVIT is a public, joint technological education district (JTED) that serves students from ten East Valley school districts. Students from Apache Junction, Chandler, Fountain Hills, Gilbert, Mesa, Queen Creek, Scottsdale, Tempe, Higley and J.O. Combs spend a half-day at EVIT in a career preparation program and the other half-day at their home high school. All 10th, 11th and 12th grade students can attend tuition-free, if they have met the class prerequisites. Free busing is provided to and from EVIT by the student's home school district for most programs.

Our Mission:

Our mission at the East Valley Institute of Technology is to provide a productive, technically trained workforce that meets the market-driven needs of business and industry.

EVIT is a Tech Prep Member School

Tech Prep begins in high school and continues through at least two years of post-secondary education. It prepares students for high-skill technical occupations and allows entry into the workplace after graduation or further education leading to an associate degree in a two-year college.

In addition to technical skills, students completing EVIT programs will also develop advanced critical thinking, applied academics, career development, life management, business, economic, and leadership skills required for entry into related occupations. All programs utilize a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience and the career and technical student organization.

Business/Industry Community College Articulation

EVIT offers many school-to-work options with participating businesses including manufacturing, automobile dealerships, hospitals, and many others. Advanced students may have opportunities in industry and community colleges in the form of job placement, apprenticeships, internships, cooperative education and college credit articulation.

When do I register?

Registration for classes is on going. Each high school and middle school in the ten districts has a designated counselor with materials and information regarding EVIT registration. Students who pre-register on the EVIT campus must be certain to register at their home school as well.

What do I bring to registration?

Students need to have a copy of their transcript and results of a recognized standardized test such as the Stanford 9 or AIMS (AIMS results must be turned in if taken.) Attendance records may be requested.

When does school start?

Students are encouraged to pre-register for EVIT courses during the regular spring registration process at their home school. Students pre-registering will receive follow-up information during the summer. Please check our website at www.evit.com for the 2011/12 calendar.

How many credits can I earn?

Three quarter (3/4) credit is earned for every nine weeks completed with a passing grade and 90% attendance. Students who miss more than nine (9) days (excused or unexcused) during a semester will receive a grade of "Audit" for the semester. Community college articulation and/or dual enrollment credit is in place for high school students in designated courses. All EVIT high school students graduate from their home high school.

When are classes?

AM classes - Monday - Friday 8:05 to 10:35 a.m.

PM classes - Monday - Friday 12:05 to 2:35 p.m.

Are there fees?

There may be fees associated with your program for tools, supplies/materials, and a career and technical student organization (CTSO).

Career & Technical Student Organizations

All EVIT students participate in a Career & Technical Student Organization. Membership in state and national clubs is encouraged:

SkillsUSA	Technical, skilled, and service careers
FCCLA	Family, Career, and Community Leaders of America
HOSA	Health Occupation Student Association
FBLA	Future Business Leaders of America

Are adult classes offered at EVIT?

Daytime classes are open to adult students up to age 22. Evening classes are available for adults in some courses. Tuition is charged for adult students. A course catalog is available. For more information, please visit <http://www.evit.com/adulted/> or call (480) 461-4028.

BUSINESS MANAGEMENT & ADMINISTRATION

BMS10 Marketing, Management and Entrepreneurship 4 Semesters

Explore the dynamic world of sales and marketing in internet marketing & e-commerce, sports, entertainment and marketing research. Learn to incorporate different marketing strategies in business and society. Students will examine roles in marketing management, explore tools to develop effective customer relations, design and create promotional materials and participate in a student-run business.

Prerequisites: 1 English and 1 math credit Keyboarding Skills

COMPUTER INFORMATION SYSTEMS

CO10 Computer Service Technician/Networking 2 semesters

In today's technological world, Computer Support Technicians are used in every business and industry. Successful completion of this course will enable students to respond to users' complaints and requests for technical assistance. Using state of the art technology, and half of their time in the lab, students learn effective tools for PC troubleshooting and repair. Soft skills are a highly effective way to achieve successful careers; these skills are included in every day work. Along with extensive rigor in the classroom, students are exposed to the relevance of simple and extensive computer and network problems and given the knowledge to resolve the trouble in an efficient and effective manner. Students are also highly equipped to pass the National Hardware and Software A+ and Net+ Certification exams required to gain employment in the Information Technology Industry.

Community college articulation is in place.

Prerequisites: 1 English and 1 math credit Keyboarding Skills

HUMAN SERVICES

CS14 Aesthetics 2 Semesters

Students in this course specialize in the science of skin and complexion care. At the successful completion of the 600-hour program, the students are prepared to take the Arizona State Board of Cosmetology Exam for Aestheticians. Students attend class four hours per day and must provide their own transportation. This program includes two semesters of courses. Students must complete both semesters regardless of hours clocked.

Prerequisites: 2.0 GPA 10 high school credits (including 2 English credits)

CS10 Cosmetology 1600 Hours

Students completing this program will develop the technical skills associated with cosmetologists, nail technicians, hair stylists, makeup artists, and aestheticians. Students receive instruction in hygiene, sanitation, customer relations and salon management. A total of 1600 hours is required to take the Arizona State Board of Cosmetology Exam. Students attend class four hours per day and must provide their own transportation. The program operates a clinic salon for the public at reduced prices.

Prerequisites: 2.0 GPA 10 high school credits (including 2 English credits)

CU20 Commercial Baking and Pastry Arts 4 Semesters

In the two-year baking and pastry arts program, students will be trained in the skills needed to obtain entry level employment in the baking and pastry industry. Students will learn production techniques and merchandising and teamwork through a hands-on approach. Students obtain experience by producing products for the culinary arts program and retail customers. Internships and work-study programs are available.

Prerequisites: 2.0 GPA 6 high school credits (1 English and 1 math credit)

CU10 Culinary Arts 4 Semesters

Students develop skills in all facets of the hospitality industry. Training is provided in culinary arts (a la carte & quantity cooking), commercial baking and dining room and table service through a hands-on approach. The program operates a full banquet facility, a breakfast/lunch cart, a retail bakery, and fine-dining providing realistic training for students. Internships and work-study programs are available.

Prerequisites: 2.0 GPA 6 high school credits (1 English and 1 math credit)

CC10 Early Childhood Education 2 Semesters

Students will gain hands-on experience in classroom education on how to manage a classroom, facilitate learning centers and support the development of the whole child. Besides individual and group projects, text work, professional development activities and computer lab assignments, students will apply their skills and implement their knowledge in the on-site Head Start program. Upon program completion, students are prepared to work in a childcare facility, after school program, preschool, or pursue additional education in this field. Advanced students participate in an internship.

Dual enrollment – 9 community college credits

Prerequisites: No criminal record 1 English and 1 Pre-Algebra credit with minimum grade of C

HUMAN SERVICES

ED10 Education Professions 2 semesters

For the student who knows he or she wants to become a certified teacher, this class will give a jumpstart on training. The college prep curriculum includes a survey study of the teaching profession and educational theories of learning. Students will conduct research; create lessons and present concepts to peers. They will research degree programs and apply for scholarships. Each student will participate in job shadowing in a school/class of his or her choice. Students identify their philosophies and develop their leadership styles in this two-year course.

Prerequisites: No criminal record

1 English and 1 Pre-Algebra credit with minimum grade of C

FM10 Fashion Merchandising 4 semesters

This program in the dynamic field of fashion merchandising provides students with the technical knowledge and skills associated with fashion design/production and apparel selection, purchase, sales and promotion. Students will be using LECTRA, a pattern making software, which is used in the industry. Notably, EVIT is the only high school in the nation to have this software. In addition to technical skills, students completing this program will also develop advanced critical thinking, career development, applied academics, life management, business economics and leadership skills required for entry into fashion design and merchandising occupations.

Prerequisites: 2.0 GPA 6 high school credits (1 English and 1 math credit)

TT10 Hospitality & Tourism 2-4 Semesters

What in the "world" would you like to do for a career? Find out first hand by booking a cruise, planning a luxury vacation, promoting a super star, or navigating the airline and hotel industry. A class project will include sales and marketing for a cruise line with a field trip on a cruise abroad. Discover where you can fit into the second largest industry in Arizona.

Prerequisites: 2.0 GPA 6 high school credit (1 English and 1 math credit)

ID10 Interior Design 4 Semesters

The Interior Design program is a two-year program designed to prepare students for employment in various decorative design occupations. Students will study the principles and elements of design, design color boards and develop a portfolio showing furnishings, fabrics, wall and floor coverings, and other materials related to the field. This program also prepares students for continuing education in an interior design school. This program includes field trips to interior design centers and other related companies. Qualified second-year students participate in job shadowing and internships.

Dual enrollment with community college credit

Prerequisites: 2.0 GPA 6 high school credit (1 English and 1 math credit)

MA10 Massage Therapy (One-Year program) 2 Semesters

The EVIT Massage Therapy program offers 720 hours of training in massage and bodywork. This program is specifically designed for Arizona state licensure. After completing the program students may apply for Arizona State Licensure and are eligible to sit for the National Certification Examination for therapeutic massage and bodywork. Students will study both Eastern and Western massage modalities including Swedish, Sports, Chair, Shiatsu, and others. Also coursework such as mycology, pathology, hygiene, professional development and ethics will be studied. Hands-on massage and bodywork will be performed in preparation for public clinic. Students must be high school seniors to enroll, and must be 18 before applying for State Licensure.

Prerequisites: 2.5 GPA Biology strongly recommended and MC10
Seniors only (Must be 18 by May of Senior Year)

MA10 Massage Therapy (Two-Year Program) 4 Semesters

The EVIT Massage Therapy program offers 720 hours of training in massage and bodywork. This program is specifically designed for Arizona state licensure. After completing the program students may apply for Arizona State Licensure and are eligible to sit for the National Certification Examination for therapeutic massage and bodywork. Students will study both Eastern and Western massage modalities including Swedish, Sports, Chair, Shiatsu, and others. Also coursework such as mycology, pathology, hygiene, professional development and ethics will be studied. Hands-on massage and bodywork will be performed in preparation for public clinic. Students must be a minimum of high school juniors to enroll, and must be 18 before applying for State Licensure.

Prerequisites: 2.5 GPA Biology strongly recommended and MC10
Juniors (Must be 18 by May of Senior Year)

HEALTH SERVICES

MC41 Allied Health 2 Semesters

This is a rigorous, two-semester academic course requiring a high level of independent study and is designed as a pre-requisite to prepare students for entry-level positions in the following areas:

- Sports Medicine & Rehabilitation Therapies
- Veterinary Assistant
- Pharmacy Technician

Prerequisites: 2.5 GPA Seniors only
(Juniors: Satisfactory completion of MC10 or equivalent academic course & special permission)
Provide own transportation to clinical sites 2nd semester
Random drug testing

MC60 Dental Assistant 2 Semesters

Students will be trained in the medical terminology, ethics, customer service, and professionalism of the dental assisting profession. Once fully trained in this class, they will be prepared to apply for a dental assistant position. Externships may be limited. Priority given based upon performance.

Prerequisites: 2.5 GPA 2 English credits & 2 math credits
No criminal record Excellent attendance
Random drug testing Provide transportation to externship sites 2nd semester

MC55 Emergency Medical Technician 2 Semesters

This class will teach students learn how to handle emergency situations. The Emergency Medical Technician (EMT) provides immediate care to individuals who have been injured. Technicians at this level are trained to provide basic medical care - such as CPR (cardiopulmonary resuscitation). They are also known as first responders. Students are prepared to take the State EMT examination.

Prerequisites: Seniors only 2.5 GPA
6 high school credits (including 1 English and 1 Algebra credit)

MC10 Health Occupations 2 Semesters

This course is designed for students interested in any health-related field and is highly recommended for students interested in advanced training at EVIT. Students study anatomy, physiology, medical terminology, human growth and development, human diseases and infection control. This course includes topics of human reproduction. Upon completion, students may go on to advanced training. **NOTE: This course has been approved by the AZ Board of Regents as a lab credit.**

Prerequisites: 2.5 GPA 1 English and 1 Math Credit
Biology (may be taken concurrently)

MC20 Medical Assistant 4 Semesters

EVIT will offer its students an opportunity to train in one of the health industry's fastest growing occupations. Medical Office Assistant is a two-year certificated program for juniors and seniors in high school. Students will focus on medical terminology, medical office procedures, body systems and medical specialties used in a medical office or health care facility. Graduates are prepared to take the examination for certification and are prepared to work in medical office positions in hospitals, clinics and other health care facilities. Clinical sites may be limited. Priority given based upon performance in class.

Prerequisites: 3.0 GPA Juniors & Seniors only
No criminal record
MC10 or equivalent course or 1 credit in Biology or Anatomy/Physiology

MC53 Medical Biotechnology 2 Semesters

Medical Biotechnology has contributed towards the exploitation of biological organisms or biological processes through modern techniques, which could be profitably used in medicine. Students will perform hands-on lab functions using state-of-the-art equipment and supplies. This program will introduce students to techniques in forensics, crime scene investigation, drug detection, and genetically modified foods. This course is an intensive introduction to biotechnology, including media and solution preparation, routine manipulations of DNA, structural properties of DNA, and regulation of gene expression. Explore the world of pharmacogenomics, pharmaceutical products, genetic testing, gene therapy, the Human Genome Project, cloning, and concerns regarding the use of modern biotechnology techniques in medicine.

Dual enrollment with MCC – 8 college credits

Prerequisites: 3.0 GPA Juniors & Seniors only 1 English credit and 1 math credit
Biology (minimum of B)
Chemistry (minimum of B - may be taken concurrently)

MC51A Sterile Processing and Distribution 2 Semesters

Sterile Processing and Distribution (SPD) Technicians sterilize surgical instruments; retrieve patient care equipment and order and stock medical and surgical supplies. They also play a critical role in infection control. The support offered by SPD's allows other medical center professionals valuable direct patient treatment time.

Prerequisites: 2.0 GPA Seniors only; 9th grade reading level
Successful completion of MC10 or Biology
Good attendance & good communication skills

NURSING SERVICES

MC30 Nursing Assistant 2 Semesters

This rigorous two-semester course is designed for students committed to a career in direct patient care. This course includes both advanced classroom instruction and clinical experiences at local medical facilities. During the clinical rotation students must be able to be flexible with hours and provide transportation to and from the clinical site. Students are fully prepared to take the state certifying CNA exam upon completion; however, most medical facilities require that job applicants be 18 years old. Students must provide of immunization or evidence of immunity to certain communicable illnesses. Note: This course includes topics of human reproduction. Clinical sites may be limited. Priority given based upon performance.

Prerequisites: 3.0 GPA Seniors only
Satisfactory completion of MC10 or equivalent academic course of Biology or Anatomy & Physiology
No criminal record
Flexible hours and transportation to and from clinical site

MC90 Caregiver 2 Semesters

This course includes both advanced classroom instruction and clinical experience at local medical facilities. Caregivers work in homes or non-skilled nursing centers providing personal care for patients.

Prerequisites: 2.0 GPA Seniors only
Satisfactory completion of MC10 or equivalent academic course of Biology or Anatomy & Physiology

ELECTRONICS TECHNOLOGY

AV05 Aviation Spectrum 2 Semesters

Explore the exciting world of Aviation. First semester students will learn the history of aviation, job opportunities, air transportation operations, introduction to Air Traffic Control and Airframe and Powerplant Maintenance. During the second semester, students will be given an introduction to Aircraft Flight Operations, the new and rapidly growing field of Unmanned Aerospace Vehicle Operations and an introduction to Airline Flight Attendant roles and responsibilities.

Dual enrollment for college credit is not required.

The first semester of this course is a prerequisite for AV10 and AV20.

Both semesters are required for all other aviation course disciplines.

Prerequisites: 2.5 GPA Pre-Algebra – Minimum grade of C

AV10 Systems for Pilots 2 Semesters

The Aviation Systems Training Program at EVIT introduces students to Aerodynamics and Basic Aircraft Systems. This course is important in the development of pilots and/or aerospace professionals. This instruction will assist anyone pursuing an aerospace career. This is the fundamental academic preparation for the student to become a more rounded professional pilot. This course uses the same curriculum as the Chandler Gilbert Community College and is taught at the college by EVIT Instructors.

Concurrent enrollment with Chandler Gilbert Community College is required.

Prerequisites: 2.5 GPA Pre-Algebra – Minimum grade of C

AV20 Ground School & Flight Training 2 Semesters

The Aviation Flight Training Program is Private Pilot Ground School, which prepares students to take and pass the Federal Aviation Administration Private Pilot Written Examination. This course is designed to cover all subject areas in a manner acceptable for certification Part 141 of the Federal Aviation Regulations. Students will concurrently receive their flight training at Chandler Gilbert Community College.

Concurrent enrollment with Chandler Gilbert Community College is required.

Prerequisites: 2.5 GPA
AV10 Systems for Pilots (students with prior flight training may be waived of this requirement)

EL10 Electronics (Robotics) 2 Semesters

Students in this class study math for electronics, basic theory for DC and AC circuits, power supply systems, logic devices, solid state theory, test equipment function/utilization, soldering, and bread boarding techniques. Electronic projects are included to augment the class study. Designing, building and completing a competition-ready robot is the focus for the first 6 weeks of the second semester for entry into the FIRST Robotic Challenge. There will also be emphasis on alternative energy sources focusing on solar and wind.

Dual enrollment with community college credit

Prerequisites: 2.5 GPA Science credit with minimum grade of "B"
Successful completion of Algebra, Geometry/Trigonometry
Clear understanding of Atomic Structures & Periodic Table of Elements

ET10 Engineering Science 2 Semesters

Students who aspire to be builders or inventors will learn and apply 3d computer design principles to aid in the creation of physical objects. The program is designed to inspire young inventors to learn the computer programs and processes necessary to create 3 dimensional objects that they will physically produce on a 3d printer. (EVIT houses the only 3d printer of this type in Arizona.) While math skills are a plus for success in this course, they are not mandatory. The principles taught in this course are essential for all occupations that involve design.

Prerequisites: 2.0 GPA

INDUSTRIAL & COMMERCIAL TECHNOLOGIES

CT10 Construction Technologies 4 Semesters

This course prepares students to learn and develop hands-on skills in all disciplines of commercial and residential construction. First year students will gain hands-on understanding of safety, hand tools, power tools, blueprints, electrical wiring, plumbing, masonry, estimating, framing, roofing, drywall, texture, and finish work. Second year students can choose a specialty to further develop advanced skills.

Prerequisites: 2.0 GPA 2 math credits

MT10 Precision Manufacturing Technology 4 Semesters

This program is for all students, providing experience in the art of manufacturing. Students will develop proficiencies geared toward industry standards in setup and operation of modern manual and computerized tools of the trade. There is an emphasis on management, leadership, quality control and business/customer relations. NIMS (National Institute of Metalworking Skills) certification is available.

Community college articulation is in place.

Prerequisites: 2.0 GPA 1 math credit

WD10 Welding 4 Semesters

Expanding opportunities in manufacturing require welding and metal fabrication skills. Students will receive training in basic metal fabrication and entry level welding techniques to build or repair structures or products. Welding processes used will include OXY/FUEL welding and cutting, PLASMA cutting, ARC, MIG and TIG welding. Students will get to work with a variety of different types of materials including but not limited to mild steel, aluminum and stainless steel. The welding program has an outstanding job placement rate. Paid internships are available. For an additional cost, students have the opportunity to get a certification through Inter-Industry Conference on Auto Collision Repair (ICAR); this certification is based upon the American Welding Society's structural sheet metal code.

Community college articulation is in place.

Prerequisites: 2.0 GPA 1 English credit and 1 math credit

AUTOMOTIVE TECHNOLOGY

AM10 Automotive Technology 4-6 Semesters

EVIT offers NATEF Certified Instruction and ASE Certified Instructors at the high school level. In a hands-on environment, students will have the opportunity to learn tasks related to engine repair, air conditioning, engine performance, electrical systems, brakes and steering-suspensions. Five instructors teach theoretical, diagnostic and practical skills aligned with the national task list (competencies). All course work leads to post-secondary training and employment in the automotive workforce for students with appropriate attitude, aptitude and attendance. Students without formal automotive training will begin in the General Automotive Systems and Service course and progress to a new course each semester. Students will have the opportunity to participate in a three-day job shadowing experience. Students may qualify for paid internships in independent facilities, fleets or dealerships. Internships are an integral part of this program.

Dual enrollment with community college credit

Prerequisites: 2.0 GPA Successful completion of 6 high school credits
Preferred minimum 8th grade reading, writing, basic math & keyboarding skills
Preferred successful completion of Pre-Algebra

AM63 Diesel/Heavy Equipment Technology 2 Semesters

Students in this program will receive training in the operation and repair of diesel engines, chassis and drives, hydraulic power transmissions and electrical and air conditioning systems. Students who complete the program and achieve job entry skills may continue with advanced training through Central Arizona College. It is recommended that students have automotive repair skills.

Prerequisites: 2.0 GPA Successful completion of 6 high school credits
Preferred minimum 8th grade reading, writing, basic math & keyboarding skills.
Preferred successful completion of Pre-Algebra

AB10 Collision Repair Technology 4 Semesters

Students will develop the manipulative skills involved in auto body repair and refinishing in Arizona's first NATEF Certified High School Program. Students will also develop an understanding of the underlying theories, technical information and related occupational information to ensure sound judgment and usage of proper procedures involved in the repairing and servicing of the automotive body and chassis. Students will perform jobs ranging from detailing to assisting with a complete paint job in a modern paint booth. Basic instruction focuses on mastery of the Automotive Service Excellence (ASE) task list, which is designed to meet ASE and Inter-Industry Conference on Auto Collision Repair (ICAR) standards. Students rotate annually between collision repair and custom painting. They can start in either course. Custom painting covers all collision paint competencies as well as custom paint techniques and procedures.

Prerequisites: 2.0 GPA Successful completion of Pre-Algebra preferred.

