



January 8, 2015

****Attention:** Applicants with a criminal history that may exclude a graduate from registry eligibility are required to contact the American Registry of Radiologic Technologists and complete a “Pre-Application” PRIOR to applying to the program. (www.arrt.org). The Pre-Application can be downloaded with contact information at <https://www.arrt.org/ethics/PREAPP.pdf>.

The Radiologic Technology Program will be accepting applications for Fall 2015, from January 18 through April 15, 2015. Below are the requirements for the Fall, 2015, admittance to the program. Please be aware that the requirements for Fall of 2016 may be different.

Prerequisites for the program include having completed the ACT test with a minimum score of 17 in science and in the composite score, and BIOL2401 Anatomy and Physiology I **

Listed are the classes that may be taken prior to acceptance into the program and are counted toward admission points.

1. *BIOL 2402 Anatomy and Physiology II
2. ENGL 1301 Composition and Rhetoric
3. PSYC 2314 Lifespan Growth and Development OR PSYC 2301 General Psychology
4. PHIL 2306 Introduction to Ethics OR HUMA 1301 Introduction to Humanities
5. MATH 1314 College Algebra OR MATH 1332 Contemporary Math I

* These classes impact the number of points given more than the other classes do.

+ Computer science elective will no longer count towards points (other than general GPA) after the application period for 2015.

- Classes are weighted (points) towards admittance. Applicants compete against other applicants for admittance. It is very difficult to be accepted if at least some of these classes are not completed. **At least one college level science** course that had a lab, and two other courses or two sciences and one other course **MUST** be completed, with a grade of "C" or better, in order to have the Required GPA points to apply toward acceptance.
- Any college level physics class that has a lab component or college algebra will be worth extra points. **See point system.**

- Passing THEA (TASP) scores must be available by May 25, unless THEA exempt or TSI Complete.
- All applicants will complete the ACT. This test is given at the TJC testing center and many other places. The ACT is given only a few times a year, so get this organized now. A composite score of 17 and a science score of 17 is required in order to apply. Get an ACT packet from the testing center on campus or go to ACT.ORG. There are postmark deadlines and specific Saturdays on which the test is given. Good timing is essential. Must have scores by May 25.
- A college GPA of 2.5 or greater and a 2.5 or better in all required classes (listed above) are required.
- An interview will be required of the top 40-45 applicants. ***Applicants selected for admittance to the program will have a criminal background check and will be drug tested.***

(If there are personal circumstances regarding the background check, applicants are required to complete an Ethics Pre-application through the ARRT (arrt.org) prior to application. The Ethics Pre-application may take 6 months to complete.)

Applicants must apply **to the program**. Applying to the college **does not mean you have applied to the program**.

A limited number of students is selected each year (approximately 26).

If you are interested in applying to the program for the Fall of 2015, application packets will be available on line at the start of TJC's Spring semester in January, 2015. Application submission deadline is **April 15, 2015**. ACT scores and test scores addressed in the third bullet above are ^{needed}, but they may be submitted as an **update** of an application as late as first orientation. Final determination for admittance will be made AFTER the end of the Spring semester.

Your Spring work **WILL** be counted towards admittance, when **YOU update** your application by **delivering or sending** an official Spring transcript **to the department chair** (to the "college" will not work for this purpose) if spring classes were taken, at any college, including TJC. Summer 2015 courses will not count towards admittance.

For those who need to maintain 12 credit hours per semester for PELL GRANT or parents' health insurance eligibility, the following classes are recommended, but **NOT** required: HITT 1305; HITT 1303; PHED 1304; PHED 1305; PHED 1206 with PHED 1166; PHED 1346; HPRS 1201 with HPRS 1105; HPRS 2301 Pathophysiology (pre-req BIOL 2402) or, BIOL 2420 (Microbiology).

WHAT IS A RADIOLOGIC TECHNOLOGIST?

A radiologic technologist is a person trained in the "art and science" of creating images of the human body using ionizing radiation. The radiologic technologist works closely with the radiology doctor (radiologist) and other physicians, and plays a vital role as a professional member of the total health care team. Patient care is an integral part of the career. Technologists work in hospitals' general radiography, surgery, trauma, pediatrics, clinics, doctors' offices, CT, MRI, mammography and many more places. This exciting and dynamic field is perpetually changing. The technology is always improving and the technologist is caught up in the wonderful world of newness and challenge while making a difference in the lives of his or her patients.

Local starting, entry-level wages are from \$17.00 to \$ 20.00 per hour. (\$35,360--\$40,000 annually)

The median annual wage of radiologic technologists was \$54,340 in May 2010. Occupational Outlook Handbook, 2010. <http://www.bls.gov/ooh/healthcare/radiologic-technologists.htm>

THE PROGRAM

Tyler Junior College Radiologic Technology Program has a twenty-four month curriculum. Classes are accepted once a year- in the fall. In the twenty four month period the student will complete classroom and laboratory sessions and spend a great deal of time (approximately 1800 clock hours) in an area hospital completing practicum (clinical education) classes. The program is very demanding and time consuming as are any other health science programs, but the rewards are great. Your two years in the program will be an event in your live that you will never forget. You may be walking to the end of the spring board from which you may jump into many other career options. The retention rate for the program is approximately 70%. The program boasts a 100% registry exam success rate.

LICENSURE REQUIREMENTS

The program is fully accredited by the Joint Review Committee on Education in Radiologic Sciences (JRCERT—jrcert.org). Graduates receive an Associate of Applied Science Degree from Tyler Junior College and are eligible to take the American Registry of Radiologic Technologists (ARRT—arrt.org) exam. Graduation from the program entitles the student a one-year temporary certification from the Texas Department of Health. Once the ARRT exam is completed, the certification becomes permanent. Both the ARRT and the Texas Department of Health have bi-annual continuing education requirements. The ARRT credential is recognized in all fifty states, Canada and Australia.

EDUCATIONAL REQUIREMENTS

A high school background in sciences and math is important for success in the listed college courses and in the program. The ACT must be taken and the THEA (TASP) must be passed or TSI completed. Students are accepted according to a numerical score which is calculated using the grades of courses listed, overall GPA, GPA in required non RADR classes, ACT scores, residence status, any patient care related experiences, previous application, and interview scores. Once the student is in the program, successful completion of all course work each semester is required in order to remain in the program. If even one course is not completed successfully in sequence, the student may not progress.

A GOOD CANDIDATE

A good candidate needs to be many things. To find out what students who have been in the program say about what it takes to succeed be in the program, it is highly recommended that you see their statements on the program web site: <http://www.tjc.edu/radtech/radtech.htm> Go to “good candidate” link, then “testimonials.” You will read exactly what students have said—the program did not edit the comments.

RADIOLOGIC TECHNOLOGY
Proposed 2015-2016 curriculum
Associate in Applied Science Degree (RADR_AAS, 8033)

Prerequisite: BIOL 2401 Anatomy and Physiology I 4
 ACT Minimum Composite and Science Reasoning Score 17

FIRST YEAR

Semester I (16 weeks)

RADR 2309 Radiographic Imaging Equipment
 RADR 1203 Patient Care
 RADR 1201 Introduction to Radiography
 RADR 1311 Basic Radiographic Procedures
 RADR 1266 Practicum I
 12

Semester II (16 weeks)

RADR 2313 Radiation Biology and Protection
 RADR 1213 Principles of Radiographic Imaging I
 RADR 2301 Intermed Radiographic Procedures
 RADR 1267 Practicum II
 **ENGL 1301 Composition I
 13

Summer Session (11 weeks)

RADR 2266 Practicum III
 RADR 2236 Special Patient Applications
 RADR 2233 Advanced Medical Imaging
 6

SECOND YEAR

Semester III (16 weeks)

RADR 2366 Practicum IV
 RADR 2217 Radiographic Pathology
 RADR 2205 Principles of Radiographic Imaging II
 +PSYC 2314 Lifespan Growth and Development
 +PSYC 2301 General Psychology
 BIOL2402 Anatomy and Physiology 2
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Semester IV (16 weeks)

RADR 2367 Practicum V
 RADR 2331 Advanced Radiographic Procedures
 *PHIL 2306 Introduction to Ethics OR
 OR*HUMA 1301 Introduction to Humanities
 ++MATH 1314 College Algebra OR
 ++MATH 1332 Contemporary Math I
 12

SUMMER SESSION (11 weeks)

RADR 2167 Practicum VI
 RADR 2235 Radiologic Technology Seminar (Capstone Course)
 3

Total Semester Hours: **64 hours**

*Satisfies the THCB Humanities elective requirement

+Satisfies the THECB Social/Behavioral Science elective requirement

** Satisfies the JRCERT Communications requirement

++ Satisfies the JRCERT Math/logical thinking requirement

The THCB Math/Science Elective requirement is met with BIOL2401 and the Math elective

** Any laboratory-based computer class.

*** Social/Behavioral Science elective: any 3-hour course in economics, geography, government, psychology, sociology, history.

**** Humanities /Fine Arts elective: Any 3-hour course in humanities or fine arts.

***** Capstone Course.

Bold Face: Denotes general education courses may be taken prior to admittance into program.

Special admission and retention rules apply. Contact an advisor or the department chair for details.

Program requires criminal background and drug screen.

**Career Opportunities in
RADIOLOGIC TECHNOLOGY**

Nature of Occupation: Radiologic Technologists use both art and science to produce radiographic images of the human body utilizing x-ray and other modalities. These images are used for diagnosis and treatment of the patient. The radiologic technologist is a vital member of the health care team and works closely with radiologists and physicians. Radiologic Technology is a patient care oriented occupation. Opportunities to expand skills or to branch into other related imaging fields are excellent.

Working Conditions: Radiologic technologists usually work in modern, well-equipped rooms of hospitals, medical clinics or doctors' offices in a rather quiet, orderly atmosphere. Leaded partitions, special protective clothing and gloves provide protection from dangerous radiation. Radiologic technologists usually work an 8-hour day and a 40-hour week, but may be called for weekend or emergency duty. By passing the examination of the American Registry of Radiologic Technologists, technologists may join the American Society of Radiologic Technologists and its state-affiliated organization.

Duties Include:

- *Arranging devices which lessen discomfort and prevent the patient from moving
- *Positioning the patient for imaging of the desired area
- *Adjusting equipment to give a clear and undistorted view of the patient's body
- *Determining proper voltage, current and exposure time for each procedure
- *Preparing and administering drugs or chemical mixtures
- *Keeping records and files and preparing reports of procedures

Employment and Outlook: There were approximately 219,900 Radiologic Technologists employed nationally in 2010. Employment is expected to grow faster than the average for all occupations through the year 2020, as new uses are found for imaging technologies in the diagnosis and treatment of diseases. Most jobs will be found in hospitals. Many technologists will find jobs with walk-in clinics, freestanding imaging centers, medical group practices and health maintenance organizations.

Interests and Abilities:

- *See detail in drawings and recognize differences in shapes or shadings
- *Rate information according to standards that can be measured or checked
- *Working with things and objects
- *Having direct personal contact with people
- *Activities of a scientific or technical nature
- *Have good health and stamina
- *Have good vision, either naturally or with correction

Career choices for this occupation include:

- | | |
|--------------------------------|------------------------|
| Radiologic Technology Educator | Application Specialist |
| Chief Technologist | Sales Representative |
| Staff Radiographer | Radiation Therapy |
| CT Technologist | Departmental Manager |
| MRI Technologist | Mammographer |
| Nuclear Medicine | Cardiovascular |
| OR Technologist | Special Procedures |
| Trauma Technologist | Quality Assurance |
| Sonographer | Supervisor |

RADIOLOGIC TECHNOLOGY ADMISSION SELECTION POINT SYSTEM

Students will be ranked by points accumulated. The students with the top 28 (approximately) points will be tentatively accepted into the program. Those ranked 29 through 45 will be considered alternates for any positions vacated before fall classes begin. The far right column can be used as a work sheet to calculate your estimated points.

FORMER EDUCATION:		POSSIBLE POINTS	
Degree earned from a regionally accredited institution	B.S.	Maximum	3
AA degree must have 12 science credits	B.A.	Maximum	2
	A.A.S.	Maximum	1
	A.A.	Maximum	1
FORMER WORK EXPERIENCE:			
MUST be hands on health care related		Maximum	6
<ul style="list-style-type: none"> • <i>A letter from your employer stating the date of hire and your daily responsibilities or tasks</i> • <i>Minimum 200 hours</i> (Letters of recommendation will not be accepted) Successful completion of EMT Basic will be considered in work experience points			
CUMULATIVE GPA:			
Points earned equals GPA multiplied by one		Maximum	4
REQUIRED GPA			
GPA of the seven (or less) non RADR classes multiplied x 4.		Maximum	16
COMPLETED COURSES:			
Completed with a grade of:	<u>Anatomy & Physiology</u>	<u>RADR1491</u>	
	A = 12 points	= 3 points	
	B = 8 points	= 2 points	
	C = 4 points	= 0 points	
BIOL 2401 Anatomy and Physiology I		Maximum	12
BIOL 2402 Anatomy and Physiology II		Maximum	12
ACT (do <u>not</u> need the writing part of test)	Composite Score	Maximum	36
	Science Reasoning Score	Maximum	72
INTERVIEW (People who have the top 40-45 points only)		Maximum	100
COLLEGE LEVEL PHYSICS CLASS (with lab): A=3, B=2, C=1		Maximum	3
<u>OR</u> COLLEGE ALGEBRA			
<u>OR</u> MEDICAL TERMINOLOGY 1 <u>AND</u> 2			
APPLIED TO THE PROGRAM BEFORE:		Maximum	2
RESIDENCY (In-District)		Set	3
After initial acceptance to the program, the applicant will document a physical exam, immunization records, and complete a drug screening and criminal background check*.			
*(If there are personal circumstances regarding the background check, applicants are required to complete an Ethics Pre-application through the ARRT (arrt.org) prior to application. The Ethics Pre-application may take 6 months to complete.)			

IMMUNIZATIONS

Texas Administrative Code, Title 25, Part 1, Chapter 97, Subchapter B, Rule 97.64

states that a student who is in a health science program which will involve direct patient contact, **MUST** have had all 3 Hepatitis B immunizations before the beginning of the second semester of the program.

This can present a **major** timing problem for students who are applying to the program.

Radiologic Technology requires direct patient contact the first semester of the program.

TIMING:

If you are using the six month régime, the first immunization is given—the second is given one month later, and the third is to be given 5 months after the second one. So, this must be started six months before the end of the first semester of being in the program or by June 15. A four month régime is available which means you could start no later than August 15.

IT IS HIGHLY RECOMMENDED that anyone who is planning to apply to a health science program that has clinical rotations in the first or second semester get started planning your timing for the Hepatitis B immunization series as soon as possible. Radiologic Technology requires clinicals the first semester.

IF A STUDENT IS ACCEPTED TO THE PROGRAM AND CANNOT PROVE THAT THE TIMING FOR THE THIRD IMMUNIZATION WILL BE NO LATER THAN THE FIRST DAY OF THE SECOND SEMESTER, THAT STUDENT MAY NOT ENTER THE PROGRAM.

There are other immunization issues, but they may be quickly resolved. The Hep B situation requires immediate attention or planning.

Immunization records for other immunizations will be required or titers proven or re-immunization will be necessary. They will not just re-immunize. They will require titers at the student's expense. If there are no records, services will not be cost free if using First Physician-ETMC at the TJC campus.

IMPORTANT: Students choosing to use the First Physician- ETMC at TJC services (i.e. physical examinations, TB skin test, and immunizations for measles/ mumps/ rubella (MMR), tetanus/diphtheria), varicella* may present their “provisional acceptance” letter as proof of acceptance to an Allied Health and Nursing (AHN) program and the first Hep B immunization will be given. The second round of Hep B will be given only when the student presents a fall semester student ID. Fall tuition needs to have been paid. So, time the first shot to be one month before you plan to pay for fall tuition. Then get the second shot right away, then get the third shot 4 months after the first shot. Time this well, or you will not get full benefit of your already paid for services.

*Varicella is chicken pox. At this time, we will accept a letter from a parent or care giver that the student had chicken pox in his/her medical history.

*Hospitals may require additional seasonal vaccines such as flu.