

# Radiologic Technology

## Radiologic Technology Degrees and Certificates

- Radiologic Technology

## Radiologic Technology Classes

### RADT 101: Introduction to Radiologic Technology

An orientation to the WVC Radiologic Technology program, history of historical events in radiology, the radiographer's role in the health care team, organization of the radiology department and hospital, elements of ethical behavior and medicolegal considerations, professional organizations and regulatory agencies.

**Credits** 2

**Weekly Contact Hours** 2

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

Acceptance in RadTech Program

### RADT 105: RADT Success I

Supplemental laboratory practice designed to reinforce theoretical principles and integrate hands on practice and radiologic technology knowledge. Skills are developed to improve performance and gain the competency required for entry into the clinical experience phase of the radiologic technology program.

**Credits** 1

**Weekly Contact Hours** 2

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

Acceptance in RadTech Program

### RADT 106: RADT Success II

Supplemental laboratory practice designed to reinforce theoretical principles and integrate hands-on practice and radiologic technology knowledge. Skills are developed to improve performance and gain the competency required for entry into the clinical experience phase of the radiologic technology program.

**Credits** 1

**Weekly Contact Hours** 2

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

Acceptance in RadTech Program

### RADT 107: RADT Success III

Supplemental laboratory practice designed to reinforce theoretical principles and integrate hands-on practice and radiologic technology knowledge. Skills are developed to improve performance and gain the competency required for entry into the clinical experience phase of the radiologic technology program.

**Credits** 1

**Weekly Contact Hours** 2

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

Acceptance in RadTech Program

## **RADT 111: Radiation Physics**

An overview to the application of radiation physics; to include basic atomic structure, the nature of radiation, x-ray production and interaction of x-ray photons with matter. An introduction to mathematics for radiology, radiation quantities and units of measure, imaging equipment: x-ray circuitry, generators and x-ray tubes.

**Credits** 5

**Weekly Contact Hours** 5

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

Acceptance in RadTech Program

## **RADT 121: Principles of Exposure I**

An introduction to the basics of radiation protection and an orientation to radiographic equipment, laboratory and facility safety. A detailed analysis of principles related to radiographic image formation and acquisition. Image evaluation and laboratory experiments reinforce theoretical principles.

**Credits** 3

**Weekly Contact Hours** 4

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

Acceptance in RadTech Program

## **RADT 122: Principles of Exposure II**

A continuation of [RADT 121](#) and analysis of digital imaging principles, PACS, image critique methods, brightness, contrast, spatial resolution and distortion. An introduction to quality assurance, quality control and maintenance issues related to the equipment. Image evaluation and laboratory exercises reinforce theoretical principles.

**Credits** 3

**Weekly Contact Hours** 4

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

[RADT 111](#) and [RADT 121](#)

## **RADT 123: Principles of Exposure III**

A continuation of [RADT 122](#) and analysis of permanent radiographic equipment, AEC, fluoroscopy, mobile equipment and systems of technique formation. Continued discussion of the quality management process, quality control and associated government and accreditation standards. Image evaluation and laboratory exercises reinforce theoretical principles presented in lecture.

**Credits** 3

**Weekly Contact Hours** 4

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

[RADT 122](#)

## RADT 131: Radiographic Positioning I

An introduction to positioning terminology and the fundamental theory, principles and practices regarding radiographic examinations of the upper and lower extremities and shoulder girdle. Experience is gained via positioning lecture and in the energized lab. Practical competency assessments reinforce principles learned in lecture.

**Credits** 6

**Weekly Contact Hours** 10

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

Acceptance in RadTech Program

## RADT 132: Radiographic Positioning II

A continuation of [RADT 131](#): to include radiographic examinations of the hip, pelvis and spine. Experience is gained in the energized lab and practical competency assessments reinforce principles learned in lecture.

**Credits** 6

**Weekly Contact Hours** 10

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

Acceptance in RadTech Program

## RADT 133: Radiographic Positioning III

A continuation of [RADT 132](#): to include radiographic and/or fluoroscopic examinations of the chest, bony thorax, skull, sinus, facial bones, abdomen and digestive system. Experience is gained in the energized lab and practical competency assessments reinforce principles learned in lecture.

**Credits** 6

**Weekly Contact Hours** 10

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

Acceptance in RadTech Program

## RADT 134: Radiographic Positioning IV

Image critique and introduction to clinical handbook. Introduction to special views of the upper and lower extremities, spine, pelvis, chest, bony thorax, cranium, abdomen, situations of trauma, mobile, pediatric and geriatric populations. Experience is gained in the energized laboratory; competency assessments reinforce principles learned. Supplemental laboratory practice designed to reinforce theoretical principles and integrate hands on practice and radiologic technology knowledge

**Credits** 6

**Weekly Contact Hours** 10

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

Acceptance in RadTech Program

## RADT 141: Radiation Biology & Protection

An overview of principles of the interaction of radiation with living systems, radiation effects on living systems and factors affecting biologic response; responsibilities of the radiographer regarding principles of radiation protection for the radiographer, patient and public; radiation health and safety recommendations and requirements of federal and state agencies.

**Credits 2**

**Weekly Contact Hours 2**

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

[RADT 111](#) and [RADT 121](#)

## RADT 151: Imaging Modalities

A basic overview of the advanced imaging areas to include, but not limited to, vascular/cardiac/interventional radiography, computed tomography, nuclear medicine, magnetic resonance imaging, ultrasonography, mammography, bone densitometry and radiation therapy.

**Credits 1**

**Weekly Contact Hours 1**

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

[RADT 111](#) and [RADT 121](#)

## RADT 152: Patient Care

Basic concepts and procedures of patient care, including consideration for the cultural, physical and psychological needs of various patient ages, and their families. Routine and emergency patient care procedures and application of Standard Precautions. Basic concepts of pharmacology, basic theory and practice of venipuncture and administration of diagnostic contrast agents.

**Credits 4**

**Weekly Contact Hours 6**

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

[RADT 121](#) and [RADT 131](#)

## RADT 161: Special Procedures

An introduction to the theory, principles, equipment, contrast media, accessories and practices regarding special radiographic examinations to include but not limited to: surgical, mobile, CNS, GI, urinary, musculoskeletal, circulatory, respiratory, biliary, reproductive and salivary systems.

**Credits 3**

**Weekly Contact Hours 4**

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

[RADT 133](#) and [RADT 152](#)

## RADT 162: Clinical Observation

Under direct supervision at a clinical education setting affiliated with Wenatchee Valley College, the student will obtain orientation to a radiographic department, observe and participate in radiographic examinations. Review of the clinical handbook with the clinical coordinator.

**Credits** 1

**Weekly Contact Hours** 2

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

[RADT 133](#) and [RADT 152](#)

## RADT 171: Radiographic Pathology

An introduction to the concepts of disease and the etiology and pathophysiology of disease to body systems. Radiographic exam indicators and common radiographic findings are reviewed and compared to normal radiographic findings.

**Credits** 2

**Weekly Contact Hours** 2

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

[RADT 122](#), [RADT 152](#)

## RADT 231: Clinical Education I

Part one of a four-part series. Focus on the clinical application and evaluation of radiography under professional supervision in a clinical education center affiliated with WVC. Apply technical and procedural knowledge through observation and participation in radiographic studies. Clinical 39 hours per week, competency based.

**Credits** 13

**Weekly Contact Hours** 39

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

Completion of first-year RADT Program

## RADT 232: Clinical Education II

Continuation of [RADT 231](#). Continue to gain radiographic experiences under professional supervision in the clinical education center. Continue completing educational objectives and clinical competencies at specified levels of competence and patient care and learns to become a committed, team oriented, employable individual.

**Credits** 9

**Weekly Contact Hours** 27

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

[RADT 231](#)

## RADT 233: Clinical Education III

Continuation of [RADT 232](#). Transition to the second assigned clinical education center affiliated with WVC. Continue to develop and demonstrate an increasing degree of competence in performance, decision making, efficiency, speed, patient care, problem solving and professionalism. Clinical 39 hours per week, competency based.

**Credits** 13

**Weekly Contact Hours** 39  
**Meets Degree Requirements For**  
Restricted Elective  
**Prerequisites**  
[RADT 232](#)

## RADT 234: Clinical Education IV

Continuation of [RADT 233](#). Continue to gain experience under professional supervision of the clinical education center. Demonstrate competency related to clinical competency requirements, decision-making, efficiency, and problem-solving in procedures demonstrated in all previous clinical courses. Clinical 39 hours per week.

**Credits** 13  
**Weekly Contact Hours** 39  
**Meets Degree Requirements For**  
Restricted Elective  
**Prerequisites**  
[RADT 233](#)

## RADT 241: Radiographic Seminar I

Part one of a four part series. Comprehensive review for the ARRT Certification Examination and expansion of theoretical basis for radiographic technological practices encountered by the student during clinical education. This course is conducted online.

**Credits** 1  
**Weekly Contact Hours** 1  
**Meets Degree Requirements For**  
Restricted Elective  
**Prerequisites**  
Completion of first-year RADT Program

## RADT 242: Radiographic Seminar II

Continuation of [RADT 241](#): Comprehensive review for the ARRT Certification Examination and expansion of theoretical basis for radiographic technological practices encountered by the student during clinical education. This course is conducted online.

**Credits** 1  
**Weekly Contact Hours** 1  
**Meets Degree Requirements For**  
Restricted Elective  
**Prerequisites**  
[RADT 241](#)

## RADT 243: Radiographic Seminar III

Continuation of [RADT 242](#): Comprehensive review for the ARRT Certification Examination and expansion of theoretical basis for radiographic technological practices encountered by the student during clinical education. This course is conducted online.

**Credits** 1  
**Weekly Contact Hours** 1  
**Meets Degree Requirements For**  
Restricted Elective  
**Prerequisites**  
[RADT 242](#)

## RADT 244: Radiographic Seminar IV

Continuation of [RADT 243](#): Final comprehensive review for the ARRT Certification Examination and expansion of theoretical basis for radiographic technological practices encountered by the student during clinical education. This course is conducted online.

**Credits** 1

**Weekly Contact Hours** 1

**Meets Degree Requirements For**

Restricted Elective

**Prerequisites**

[RADT 243](#)