



**Thank you for expressing an interest in York Technical College's  
Continuing Education  
Health and Human Services**

**HSC 1821 070  
Computerized Image Processing  
Module II**

**Description**

This module is presented in an online format and can be accessed from a computer with Internet capability. Instruction and education in Computerized Radiography and Digital Imaging technology is at premium in today's world. The majority of current practicing radiographers have had no formal training in this area due to its recent advent. The reality is that this technology is being implemented into clinical settings for use by technologists who do not understand or feel comfortable with the process. Often the training provided by the manufacturer is limited by cost or time. This course will create access to professionally approved instruction with unlimited capacity for delivery. Course must be completed within a maximum of 20 weeks.

1. Define and discuss "pre-processing" function vs. "post-processing" functions.
2. Compare film -screens H & D curve to algorithm application/gradation function in CR how it relates to "speed equivalency".
3. Define "exposure indices" and their relationship to patient exposure.
4. Describe how dynamic range and pixel depth are related.
5. Describe what is meant by the terms:
  - Noise
  - Signal to Noise ratio
  - Sensitivity numbers
  - Quantum Mottle
  - Histogram analysis/errors
  - Exposure latitude vs. image latitude
  - Speed vs. Speed class
  - Contrast resolution
  - Spatial resolution
  - Pixel depth/Bit depth
6. Explain technique formation as it applies to the principles of CR and its' effect on image resolution.
7. Explain proper handling and storage of CR cassettes.
8. Window leveling/Window width controlling factors.
9. Discuss all aspects of spatial and image resolution, image latitude formation, image density formation, histogram formation and usage, patient dose related to CR use, CR's response to scatter, and "Look-up Tables" function.
10. Technical Factor manipulations influence on patient dose and resolution.

**Instructor**

Instructor: Michele Wells B.S. HCM, RT (R), (M), RDMS Email: [mwells@yorktech.com](mailto:mwells@yorktech.com)

**Credit**

This module is approved by SCRQSA for 12 hours- Category B.

Upon Completion, the participant will be awarded a Certificate from York Technical College for 12 hours (1.2 CEUs).

**Tuition**

\$219 for the Module

**Salary Range**

\$10 - \$20

**Career Opportunities**

Hospitals, clinics, Physician offices, other healthcare facilities

**Computer**

- CD-ROM drive with speakers

**Requirements**

- Internet access

**General Information**

If you have any questions please contact:  
Continuing Education/ Health and Human Services

Linda Bolick Program Manager (803) 981-7194 <a href="mailto:bolick@yorktech.com">bolick@yorktech.com</a>	Robert Hamilton Program Coordinator (803) 981-7348 <a href="mailto:rhamilton@yorktech.com">rhamilton@yorktech.com</a>
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# How to Enroll

## Mail-In

York Technical College  
452 S. Anderson Rd  
Rock Hill, SC 29730  
Attn: Continuing Education  
*Send registration form and payment*

## Fax

Companies may fax letters of authorization or purchase requisitions for registration.  
FAX: 803-803 981-7327  
Attention: Continuing Education

## In Person

Continuing Education Center  
Building C  
Monday – Thursday 8:00 A.M. - 8:00 P.M.  
Friday 8:00 A.M. - 3:00 P.M.

## Phone-In

*Have Charge Card & Schedule Handy For Charge Card Registration*  
CALL: (803) 325-2888  
Mon. – Thurs 8:00 A.M. - 8:00 P.M.  
Friday 8:00 A.M. - 3:00 P.M.

*To ensure participation, students should register five business days prior to the start of class. Refunds will not be given to persons cancelling less than two business days prior to the start of class. If we are forced to cancel a class due to low enrollment, full refunds will be made.*

Mail in registration form for HSC 1821 070  
Online Radiography Computed Radiography  
Image Processing  
Module II

Name \_\_\_\_\_ SSN \_\_\_\_\_ DOB \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Email address (PLEASE PRINT CLEARLY) \_\_\_\_\_

Daytime phone \_\_\_\_\_ Evening phone \_\_\_\_\_

**Mail payment (payable to York Technical College) to: York Technical College, CE  
Registration, 452 South Anderson Road, Rock Hill, SC 29730**

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