Radiologic Technology (AAS 051) and Computed Tomography (E90)

SVCC CTE Program Review Template

This program review template will be used to review the following program and courses.

Program (degree and related certificates): Radiologic Technology (AAS 051) and Computed Tomography (E90)
Related program courses that are part of the data set: Radiologic Tech RAD 100 RAD 101 RAD 102 RAD 103 RAD 110 RAD 111 RAD 120 RAD 121 RAD 122 RAD 200 RAD 201 RAD 202 RAD 220 RAD 221 RAD 222 RAD 223 RAD 224 CT RCT 100 RCT 101 RCT 102 RCT 103

CTE Program Objectives

Prompts: 1. *What are the overarching objectives/goals of this program or programs?* *2. To what extent are these objectives being achieved?*
Response to prompts (**respond to all prompts**): Radiologic Technology (AAS 051) -- After completion of the AAS degree the graduate will be able to pass the Radiologic Technology (RT) Registry exam and perform as an entry level Radiologic Technologist. Computed Tomography (E90)--After completion of the Certificate degree the graduate will be able to pass the Computed Tomography (CT) Registry exam and perform as an entry level technologist in Computed Tomography.

Radiologic Technology (AAS 051) and Computed Tomography (E90)

Both degrees have a high registry pass rate (95% pass rate for RT)and graduates are performing well as entry level technologists as indicated on employer surveys.

CTE Program Review Analysis

Prompts:

1. List all pre-requisites for this program (e.g., courses, placement requirements).
2. List or attach all required courses (including titles) for completion of this program including institution required courses (e.g., student success, first year experience, general education requirements).
3. Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.

Response to prompts (respond to all prompts):

1. Radiologic Technology (AAS 051)—students are admitted to the program by application process. A point system is used to rank students based on number of college courses and grades achieved in those courses. Students with highest points are placed into the program. Requirements for application include two recommendation forms, TEAS aptitude test, college-level English, Math, and Biology courses.

Computed Tomography (E90)—Students must be a Radiologic Technologist or RT Registry eligible, with cross sectional anatomy and phlebotomy prerequisites completed to be admitted into the program.

2.

Radiologic Tech

NRS 116- Medical Terminology for Health Careers
RAD 100
RAD 101
RAD 102
RAD 103
RAD 110
RAD 111
RAD 120
RAD 121
RAD 122

RAD 200
RAD 201
RAD 202

RAD 220
RAD 221
RAD 222
RAD 223
RAD 224

Communications Class- 3 credits
MAT 106 or MAT 121 or higher- 3 credits
BIO 108- 4 credits
Social/Behavioral Science- 3 credits

CT
RCT 100
RCT 101
RCT 102
RCT 103

3. Radiologic Technology (AAS 051)—requires 69.5 hours to complete. This was recently reduced from 73 credit hours. The curriculum includes several clinical courses for hands-on experience working in the field and this contributes to the excess over 60 credit hours. This number of credit hours for this type of program is very typical.

CTE Program Need

Prompts:
1. How strong is the occupational demand for the program?
2. How as demand changed in the past five years and what is the outlook for the next five years?
3. What is the district and/or regional need?
4. How are students recruited for this program?
5. Where are students recruited from?
6. Did the review of program need result in actions or modifications? Please explain.

Data sources: Table 1A, Table 1B, Table 2, Occupational Follow-up Survey data

For local data on wages use Illinois Department of Employment Security: find at
http://www.ides.illinois.gov/LMI/Pages/Occupational_Employment_Statistics.aspx
Use region #6 (NW) or by individual county.

For local data on occupational outlook use IDES: find at
http://www.ides.illinois.gov/LMI/Pages/Employment_Projections.aspx
Use LWA #4.

National data on wages and occupational outlook can be found at the U.S. Bureau of Labor Statistics. Use this link: http://www.bls.gov/ooh/home.htm. Select occupational group and determine entry level education. Then select occupation.

Response to prompts (respond to all prompts): In your narrative, please refer to the data sets or evidence you have chosen to support your case.

There is occupational demand for both Radiologic Technologists and Computed Tomography technologists. The IDES occupational data does not list the profession separately for either Radiologic Technologists or Computed Tomography technologists—no data listed for either one. U.S. Bureau of Labor Statistics has a 12% increase in job demand for 2016 – 2026 for Radiologic Technologists, faster than average.

The U.S. Bureau of Labor Statistics decreased the estimated need from five years ago. There is a demand in the district or region. We are required to track our employment rate through our accreditation agency, Joint Review Committee on Education in Radiologic Technology. We have had a 91% employment rate for our graduates for the past five years. A sharp increase in the need in the last few years specifically.

We recruit students by marketing the program at job fairs, student presentations at local schools, visits to counseling departments at Rock Valley and IVCC, billboards, brochures, and Facebook. The program consistently has more applicants than seats available. However, there is a low number of applicants from northern region every year.

Review of program need did not result in any changes.

2.

CTE Program Cost Effectiveness

Prompts:

1. What are the costs associated with this program?
2. How do costs compare to other programs on campus?
3. How is the college paying for this program and its costs (e.g. grants, etc.)?
4. If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.
5. Did the review of program cost result in any actions or modifications? Please explain.

Available Data Sources: Table 3A, Table 3B

Response to prompts (respond to all prompts). In your narrative, please refer to the data sets or evidence you have chosen to support your case.

1. The Radiologic Technology program has additional expenses due to the technology/equipment needed, the travel to clinical sites, and accreditation expenses. The Computed Tomography program does not have these additional expenses. Some of the expenses are paid through course fees. Overall net income for the program improved in FY 2017 and it is anticipated to remain at this level in the future.

2. The costs may be higher than other programs in the college due to the additional expenses.
3. Funding bonds have been used for purchasing equipment. Course fees cover other expenses.
4. Most costs for the programs are not covered by grant funding.
5. No actions or modifications were made after reviewing program costs.

CTE Program Quality

Prompts: Respond to all prompts.

1. What are the program's strengths?
2. What are the identified or potential challenges of the program?
3. What are the delivery methods of this program? (E.g., traditional format/online/hybrid/team-teaching etc.)?
4. How does this program fit into a career pathway?
5. What innovations have been implemented or brought to this program that other colleges would want to learn about?
6. Are there dual credit opportunities? If so please list offerings and the associated high schools.
7. What work-based learning opportunities are available and integrated into the curriculum?
8. Is industry accreditation required for this program? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek.
9. Are industry-recognized credentials offered? If so, please list.
10. Is this an apprenticeship program? If so, please elaborate.
11. If applicable, please list the licensure examination pass rate.
12. What current articulation or cooperative agreements/initiatives are in place for this program?
13. Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?
14. What is the faculty to student ratio for courses in this program? Please provide a range and average (Table 1A, row j).
15. What professional development or training is offered to adjunct and full-time faculty that may increase the quality of this program?
16. What is the status of the current technology and equipment used for this program?
17. What assessment methods are used to ensure student success?
18. How satisfied are students with their preparation for employment?
19. How is student satisfaction information collected?
20. How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)
21. How often does the program advisory committee meet?
22. How satisfied are employers in the preparation of the program's graduates?
23. How is employer satisfaction information collected?
24. Did the review of program quality result in any actions or modifications? Please explain.

Radiologic Technology (AAS 051) and Computed Tomography (E90)

Available Data Sources: Table 1A, Table 1B, Table 2, Table 4A, Table 4B, Table 5A, Table 5B, Table 6, Graduate follow-up data, program surveys, focus groups, interviews, etc.

Response to prompt (respond to all prompts). In your narrative, please refer to the data sets or evidence you have chosen to support your case.

1. Radiologic Technology program strengths. The program is well-established with high registry pass rates, high employer surveys, and high graduate surveys. The registry 5 year pass rate is 95%. The employer surveys have consistently ranked new graduates as good or excellent. The graduate surveys consistently rate the overall quality of the program as good or excellent. Computed Tomography strengths: The program is the only specialty of Radiologic Technology offered at Sauk. It is needed by local hospitals and does have good enrollment yearly.
2. Radiologic Technology program challenges. Retention is a chronic challenge for the program. Our accreditation body requires a 75% retention rate. Our program is below this benchmark. Several measures have been implemented each year to increase the retention rate. The latest attempt is a new curriculum with hybrid courses to help those that travel far to the college, and an introductory course to be taken before the students enter the program, and a reduction in program length and clinical hours required. These were implemented Fall 2017. Challenges for the Computed Tomography program include finding good textbooks/resources for the courses. Supervision at the clinical sites is not as consistent as the Radiologic Technology program due to lack of yearly clinical instructor meetings.
3. Deliver methods. Radiologic Technology program is given in traditional format with some hybrid courses. There are four hybrid courses in the program. Several clinical internship courses included in the program. The Computed Tomography program is given in traditional format with hybrid courses. There are three hybrid courses and one clinical course in the program.
4. The Radiologic Technology and Computed Tomography programs do not fit into career pathway.
5. Our simulation testing methods are unique compared to how other programs complete theirs. SVCC students appreciate the system and how it enables them to do more exams earlier in the semester in the clinical sites. The use of surgical and portable equipment in our simulation testing is also unique and has many benefits for the students when they start surgical rotations in the clinical sites.
6. There are not any dual credit opportunities for Radiologic Technology or Computed Tomography.
7. In both Radiologic Technology and Computed Tomography students are required to complete clinical internships. Approximately 1500 hours are completed in the RT program, 375 hours in the CT program.
8. Accreditation is required for the RT program. This may be regional accreditation or by the accrediting body Joint Review Committee in Education of Radiologic Technology. (JRCERT). The RT program is accredited by JRCERT. The Computed Tomography program does not require accreditation.

9. After a graduate of the program passes the Registry exam in Radiologic Technology, their credentials are RT (R). When a Computed Tomography student passes the Registry exam in Computed Tomography their credentials are RT(R)(CT).
10. Neither program is an apprenticeship program.
11. Radiologic Technology has a 95% Registry 5-year pass rate. 100% pass rate last year. CT
12. The Radiologic Technology program has formal articulation agreements with NIU, SIU, and University of St. Francis. No articulation agreements for the Computed Tomography program. There are several Affiliate Agreements with our clinical sites used.
13. No new partnerships have been formed since the last review.
14. Average student to faculty ratio for Radiologic Technology is 16:1. The range is 15:1 to 17:1. For the CT program, an estimate is 10:1 or lower ratio.
15. Numerous opportunities for faculty development are available through national and state professional organizations. Our full time and part time instructors attend the state annual conference yearly (Illinois State Society of Radiologic Technologists) through Perkins funding. The rapid change in technology and the field in general creates a challenge for faculty. We have used faculty development funds in the past to attend seminars and workshops
16. In 2011 the Radiologic Technology department was moved from the third floor to the second floor. New equipment was purchased during the transition---a digital unit was purchased. However with rapidly changing technology some equipment is becoming obsolete. There are two energized (will make x-ray exposures) rooms in our department. One room has technology that is rarely seen in the clinical setting. It would be to the benefit of the students and the program to have updated equipment and software installed. With the exception of the outdated room, overall the equipment would be rated as average for a Radiologic Technology program. The CT program uses equipment at the clinical sites and does not have an onsite unit.
17. The program is required to track student success rates for our accreditation agency, JRCERT. The agency requires benchmarks to be met and if they are not met, methods must be created and documented to bring success rates into the acceptable range. The success rates must be published and available to the public. Success rates are posted on SVCC Radiologic Technology webpage. https://www.svcc.edu/academics/programs/health-and-safety/radiologic-technology/pass-rates.html With the exception of retention rates, the RT program consistently meets the benchmarks set. The CT program does not have a method to track student success rates.
18. A graduate survey is sent every year. The return rate for the surveys is generally low, but does vary year to year. We have tried different methods to increase the return rate, including online surveys with the additional mailed surveys. This year, a $25 gas card incentive was given and already the number of returns has exceeded the previous year.
19. Student satisfaction in the Radiologic Technology program is measured by the graduate survey responses. This survey is sent yearly. For the Computed Tomography and Radiologic Technology program, course evaluations are completed each semester for each course.

20. Employers are engaged in the Radiologic Technology program by advisory committee meetings, informal monthly meetings with SVCC full-time faculty, contact with students placed and employed in their departments, and employer evaluations. Employers are engaged in the Computed Tomography program by informal monthly meetings with SVCC full-time faculty, and students placed and employed in their departments.
21. The program advisory committee for the Radiologic Technology program meets twice per year. Each meeting is approximately three hours in length. Approximately 20 -23 people attend these meetings. The Advisory Committee for the Computed Tomography program has met once. This was in preparation of the program and advice on the set-up and needs of the community/clinical sites. We do have informal monthly meetings with clinical site department directors to assess any changes that may be needed to improve the CT program.
22. Employers consistently rate graduates of the Radiologic Technology program as overall good or excellent. Employers overall are satisfied with Computed Tomography graduates.
23. Employer surveys are completed yearly for Radiologic Technology graduates. Return rate for local employer surveys is high. The Computed Tomography program has informal meetings with employers to assess satisfaction of the program.
24. Actions or modifications that will be considered include: formal employer evaluation of the Computed Tomography program, request for updated software/new equipment for the Radiologic Technology program, and implementation of methods to increase graduate survey responses for the Radiologic Technology program.

Focused Questions from the Administrative Review Team (ART)

Question 1. What recommendations do you have to improve enrollment in the sonography program?

Response to question 1 (please refer to any data sets or evidence to support your case):
The sonography program is now briefly covered during informational meetings for prospective students. We also discuss the program during the year with current students. We specifically discuss the program with students that have indicated they are interested in continuing their education in sonography after graduation.
This has been challenging to convince students to go to College of DuPage since a program is located in Quad Cities and is closer, less expensive, and shorter duration. However, the program is not accredited, so we have decided not to be affiliated with them.

Question 2. Recent changes were made to the Rad Tech program curriculum. In what ways have those modifications impacted the program?

Response to question 2 (please refer to any data sets or evidence to support your case):
We have only had one semester with the revised curriculum. And that semester did not have any changes from the old curriculum. The new admitted students were required however to take the RAD 100 course before starting the program. The prerequisite was designed to help with retention to better inform students of the healthcare profession before starting the

program. Unfortunately, one student did withdraw from the program who did complete the RAD 100 course, because she stated she did not like the profession. She stated she could not evaluate the clinical experience in the four-hour clinical observation that is part of the course. We will consider extending the clinical observation that is part of the course.
We do expect positive outcomes from the new curriculum. Students will have less travel to the college, more online requirements, less clinical hours, and a graduation date that will help with employment be competitive with other Radiologic Technology programs.

Question 3. Are there any anticipated challenges that may impact Rad Tech accreditation that the program or the College should be examining?

Response to question 3 (please refer to any data sets or evidence to support your case):
There are not any foreseen challenges that may impact accreditation of the program.

Question 4. How has the Rad Tech advisory council contributed to the direction of the program?

Response to question 4 (please refer to any data sets or evidence to support your case):
During these meetings we discuss equipment needs for the program. Last year a C-arm and portable unit were donated to the college.

Our competency forms used in the clinical site for evaluating students was changed from input from clinical sites. The documentation of technical factors and patient history section was recently changed.

We ask for updates from each clinical site and from this information we alter student scheduling based on new physicians, equipment, or workflow change. We increased placement of students at St. Elizabeth Medical Center last year from this.

We ask for employment needs at each clinical site. This helps us to inform graduates of potential job opportunities available.

We have a student representative at each advisory meeting. The student gives a 15 - 20 minute presentation based on feedback from the second-year class on positive aspects of the clinical component of the program and areas for improvement. This has generated changes in instruction at the clinical sites.

The advisory committee helped to develop/change the mission statement last fall.

Question 5. PTR Focus. Discuss any challenges relating to student equity. Provide recommendations for improvement (if necessary).

Response to question 5 (please refer to any data sets or evidence to support your case):
From the committee data and suggestions, no inequity gaps in racial enrollments and racial grade distribution is present. Therefore, deduction is that minorities are dropping out due to issues outside of the classroom. Health Sciences Retention Coordinator will be utilized more. Also, a mentor will be assigned to each first-year student from the Rad Tech club.

Males are underrepresented. They make up 30 percent of overall enrollment, but only 13 percent of radiology students. We are investigating marketing strategies for this. Also examining other trends in male enrollment.

Responses to Program Challenges. Every program has challenges it must overcome. This program review process allows Sauk employees to identify those challenges and then create a plan to overcome those challenges. Please describe the program's challenges and the purposed response below. These responses will be added to the Operational Planning matrix found below.
Response to Challenges: A perennial challenge is a retention rate of below 75%. We have tried several methods to improve this. Next year we will incorporate the Health Professions Coordinator and a mentorship program to help students remain in the program.

Program Bookkeeping Tasks

Task List	Description of Task	Is the task complete?
Course outlines	Please review all course outlines for the courses listed at the top of this document and send it to Curriculum Committee for approval. ALL outlines must go through Curriculum Committee even if no or few changes were made.	Yes
Catalog descriptions	Please review catalog descriptions of the program. If there are changes to the program description, please send it to the Curriculum Committee for approval.	Yes
Course descriptions	Please review course descriptions found in the catalog that are listed at the top of this document. If there are changes to the course descriptions please send them to the Curriculum Committee for approval.	Yes

Reviewer's Final Recommendation

Recommendation	Check only one	List program name (if more than one is being reviewed or make additional copies of this table for each program)
Continued with minor improvements		
Significantly modify the program		

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Placed on Inactive Status	☐	☐
Discontinued/Eliminated	☐	☐
Other, please specify:	☐	☐
Summary Rationale Please provide a brief rationale for the chosen action.		
Intended Action Steps What are the action steps resulting from this review. Please detail the timeline and/or dates for each step.		

Signature/Date	**Program Review Team Member**	
	☐	Chair
	☐	Member
	☐	Member
	☐	Member
	☐	Member

Radiologic Technology (AAS 051) and Computed Tomography (E90)

Program Review. Items from the program review will be entered here. After this program review is complete and approved, transfer (paste and copy) the items below to your FY 2019 Operational Plan.

* Use the origination code PR 2015.

Origi-nation Code*	Date Activity was Added to this OP (MM/DD/YYYY)	Name(s) of Individual(s) Responsible	Description/Purpose/ Justification of Proposed Activity	Goal/Desired Result from Activity (measurable and under department's control)	Target Completion Date for This Activity (MM/DD/YYYY)	Actual Results from this Activity	Actual Completion Date for this Activity (MM/DD/YYYY)
PR	March 2018	Dianna Brevitt, Maggie Young	Individual student conferences completed by midterm first semester. Use SVCC early alert system and Health Professions Retention Coordinator.	Increase RAD184 and RAD 185 completion rate and persistence trend to 80%.			
PR	March 2018	Dianna Brevitt, Maggie Young	Assign individual mentor to first-year students from Rad Tech club.	Increase retention rate.			

Comments:

Program Review Committee & Administrative Review Teams Recommendations
The following are the recommendations from the Program Review Committee and the Administrative Review Team: Group then looked at data in regards to people dropping out of the program. Group had learned previously from the data that minorities had dropped out of the program at slightly higher rates than non-minorities. Pulled up data on the reasons why students had left to look for trends with the thought of coming up with strategies to help. In analyzing the data, no specific trends emerged in terms of reasons. Reasons for withdrawing from the program were diverse across different demographics, and within minorities group. Group moved into discussing the overall direction of the radiology program. Discussed better use of the Health Sciences Retention Coordinator. Dianna and Maggie will reach out to ensure she is at orientation, and that students have her contact information. It was determined that she is not just there for nursing, rather for all of health sciences. In terms of mentorships, Dianna and Maggie will pair up second year students with first year students to help them get through. Lacy had the idea that during simulations it would be a good idea to bring out a clinical instructor to meet the students and give them a better idea of how it will go during clinicals. Also, it was recommended to bump up the hospital time to two mornings. Entire group thought these were very good ideas. Steve also brought up having a Sauk Success to market, preferably male (underrepresented) veteran. Dianna and Maggie will see if they can find a person. Can have a split screen of a military person in fatigues, then in a radiology uniform. Group also discussed surveying students in RAD 100. After taking the course, are they more likely to go into rad tech, the same, or less? If less, than why? This will help in figuring out why people go into the field, and why they exit. The group ultimately discussed how some of these initiatives will both improve the quality and diversity of applicants into the program, and help those accepted once they are in.

Signature of the Program Review Committee Chair	

President's Recommendation
The following are the recommendations from the President:

President's Signature/Date	