SVCC CTE Program Review Template

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

Program (degree and related certificates): AAS 061, AAS 065 H69, H65, H64, H94
Related program courses: EET 107, EET 110, EET 207, EET 218, EET 245, EET 252, EET 256, EET 261, EET 299 ENE 130 IND 108, IND 118, IND 131, IND 218, IND 219, IND 239, IND 250 ELT 101, ELT 120, ELT 259, ELT 261, ELT 262, ELT 265

CTE Program Objectives

Prompts: *What are the objectives of this program and the courses related to this degree(s)/certificate(s)?*
Response to prompts: The objective of this program is for students to obtain employment in the field of industrial technology maintenance and repair.

CTE Program Need

Prompts: *Is there a need for this program? Is the array of courses offered for this program appropriate to meet the needs of students? Are high quality jobs available for graduates of this program?*
Data sources: Table 1A, Table 1B, Table 2, Occupational Follow-up Survey data For local data on <u>wages</u> use Illinois Department of Employment Security: find at <u>http://www.ides.illinois.gov/LMI/Pages/Occupational_Employment_Statistics.aspx</u> Use region #6 (NW) or by individual county. For local data on <u>occupational outlook</u> use IDES: find at <u>http://www.ides.illinois.gov/LMI/Pages/Employment_Projections.aspx</u> Use LWA #4. National data on <u>wages and occupational outlook</u> can be found at the U.S. Bureau of Labor Statistics. Use this link: <u>http://www.bls.gov/ooh/home.htm</u>. Select occupational group and determine entry level education. Then select occupation.

Multicraft, Electronics, and Electricity

Possible topics to discuss: Number of students in the program, number of students in the individual classes, number of students by modality (online, face-to-face, dual credit), number of majors, and number of degrees completed, quality and number of jobs available to graduates.
Response to prompts (identify strengths and challenges): In your narrative, please refer to the data sets or evidence you have chosen to support your case. The need for this program is highlighted through the work of the area multicraft workforce committee and development of the extended multicraft internship. Over 30 local industries were represented at the introduction of the program and all expressed the difficulty they have obtaining qualified entry-level technicians. Nationally, the entire country is experiencing a shortage of industrial technicians. The workforce must be updated to include trained, industrial technicians. The annual compound growth rate for manufacturing is projected to be at 0.12 through 2022. [Illinois Industry Employment Projections] This does not include retirements. A large share of the workforce is currently reaching retirement age which will increase the actual need for qualified candidates for jobs. This also does not include the change in manufacturing to a need for more technically qualified employees over traditional assembly workers. According to a 2013 NIU study, the primary difficulty in finding qualified industrial maintenance employees is lack of experience or training. [Promoting Regional Prosperity in Northwest Illinois – 2013 NIU study] The entry level wage for electrical and electronics repairers for industrial equipment is 19.46. The median wage is $27.44. [IDES 2015 Wage Survey for Northwest Illinois] Average class enrollment is 8. Total 5-year enrollment 2012-2016 was 1266. Many of the students enrolled in the program are part-time students. This affects class size and completion rates. Many students only take the classes until they are able to secure employment.

CTE Program Cost Effectiveness

Prompts: *Is the program cost effective? What steps can be taken to offer courses more cost effectively? Does the program need additional resources?*
Available Data Sources: Table 1A, Table 1B, Table 3A, Table 3B
Possible topics to discuss: Has the program remained within its allocated budget? Is the budget adequate to supply necessary services? Is the program's net income positive or negative? Does the program need additional resources? If so, what resources are needed? Is class size appropriate and cost effective?
Response to prompts (identify strengths and challenges). In your narrative, please refer to the data sets or evidence you have chosen to support your case.

Multicraft, Electronics, and Electricity

The program has shown a loss over the last 5 years. This loss was mostly caused by the refurbishment of the technology wing of the school. Training equipment had not been replaced for years and a large investment was required to replace training equipment. Equipment was purchased from funding bonds. The budget is adequate to cover normal area expenses.

The rapid growth of the multicraft program has required the purchase of two additional trainers. These will be funded from the 2016 Perkins budget. This should allow for 12-16 students in all lab classes.

CTE Program Quality

Prompts: *Do the program and the program's courses provide quality and pertinent educational opportunities for students? What steps, if any, need to be taken to update or improve the program or the program's courses? Describe any programmatic achievements including any accreditation, certifications, and licensures.*

Available Data Sources: Student surveys, Table 1A, Table 1B, Table 2, Table 4A, Table 4B, Table 5A, Table 5B, Assessment Data Base, College Dashboard, Graduate follow-up data, program surveys, focus groups, interviews.

Possible topics to discuss: Fulltime to part-time faculty ratio, amount of overload, class sizes, communication practices between full-time and part-time faculty (including dual credit), professional development of faculty, grade distributions, success of students in classes with prerequisites, course scheduling (sequencing), convenience of class schedule (day, evening, hybrid, online course availability), relevance of equipment.

The following topics MUST be discussed in this section to satisfy ICCB and HLC guidelines: retention rates, degree completion rates, proportion of faculty participating in assessment (FT and PT including dual credit) and the impact of academic assessment on the program.

Response to prompt (identify strengths and challenges). In your narrative, please refer to the data sets or evidence you have chosen to support your case.

Completion rates for the program are 18/55. Retention rates are 5-10% below the college average. The low completion and retention rates are directly related to the program fulfilling its primary goal, students get jobs in the field.

This has been addressed through the multicraft extended internship program which is designed to allow students to work 3 days a week while still completing their degree in 2 years. It is too early to determine if it will increase completion and retention rates.

Math has now been embedded in ELT 120 and EET 107 courses. This is a direct result of discussions initiated from academic assessment. Math courses had been put off by students

until their final semester. ELT 120 or EET 107 should be first semester courses and the embedded math will benefit students in all tech courses.

Focused Questions from the Administrative Review Team (ART)

Question 1. Are the CIP codes for the degrees and certificates found in this program review appropriate? Make recommendations for any changes.

Response to question 1 (please refer to any data sets or evidence to support your case):

The CIP code for the 065 degree should have been changed to reflect that it was an industrial engineering technology program. No change is necessary since the degree has been deleted.

Question 2. How can the curriculum be streamlines for the A.A.S. 065 (Electronic Engineering Technology) program in order to address low program class enrollments?

Response to question 2 (please refer to any data sets or evidence to support your case):

The Electronic Engineering Technology program needs to be internally deactivated and modifications made to the Multicraft program electronics emphasis. Local jobs in the electronics and control fields require many of the multicraft skills in addition to the electronics skills. The Multicraft program is a more viable pathway to local employment.

This has been completed.

Question 3. Is it worthwhile to integrate more math into the curriculum instead of having stand-alone math classes that students must take?

Response to question 3 (please refer to any data sets or evidence to support your case):

Math has been integrated into ELT 120 and EET 107. Both courses include the equivalent math to MAT 106 (EET 107 also includes skills from MAT 121 and 122). This is a new addition for FY2016 and the full impact of the change is yet to be determined. The first semester results were very promising. Of 15 students taking the equivalent of the MAT 106 final exam, 12 passed with a C or better, 2 received Ds, and 1 student failed the math portion.

Question 4. Are there innovative ways that these programs can save money and become more of a profit center for the College.

Response to question 4 (please refer to any data sets or evidence to support your case):

Multicraft, Electronics, and Electricity

The extended internship program has received excellent support from local industry. This program could increase enrollment and profit for the program. This is also a new program and has only been active for 1 semester. It has received a great amount of industry support.

Question 5.
Response to question 5 (please refer to any data sets or evidence to support your case):

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.

Two main problems exist for the multicraft program. The first is under-prepared students. The second is improving retention/completion rates.

Response to Challenges:
Both of these problems are currently being addressed with new programs.

The addition of math to first semester courses should help to improve our students' readiness for later courses. A new communications course targeting the needs of industry could follow to give our tech students a different path for communication general education. This might be implemented as an introduction to technical writing and taken in place of ENG 101. It would be followed by ENG 111, technical writing.

The extended internship program with weeks divided between college and work was designed to allow students to work while getting a degree and may help to lessen the loss of students to our local industry as soon as they have acquired some industrial skills.

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.	X

Multicraft, Electronics, and Electricity

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.	X
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.	X

Signature/Date	Program Review Team Member	
		Chair
		Member
		Member

Multicraft, Electronics, and Electricity

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 2016 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)
Comments:								

CTE PROGRAM REVIEW SUMMARY REPORT
***Required* ICCB Program Review Report**

Sauk Valley Community College (506)   **Academic Year 2016-2017**

Program Identification Information (only one CIP per template)

6-digit CIP	470101

Career Cluster	Career Pathway
Manufacturing	Maintenance, Installation and Repair

Program of Study	SVCC's Program Title
Electrical/Electronics Equipment Installation & Repair, General	A.A.S. 061

Degree or Certificate Type	Check only one
03 – AAS	**X**
20 – Occupational Certificate of 30-50 credits	
30 – Occupational Certificate of 29 or less credits	

SVCC Action

Possible Actions	Check only one
Continued with minor improvements	**X**
Significantly modified	
Discontinued/Eliminated	
Placed on inactive status	
Scheduled for further review	
Other, please specify:	

Need, cost-effectiveness & quality. C*reate a short summary paragraph for each question below.*

Need: Is program enrollment sufficient to justify this program? Are the majority of students in this program completing degrees or certificates? Are the students within this program marketable and employable?

The Multicraft program is growing along with the need for qualified technicians in local industry. Many students have left the program before completing a degree or certificate to take a new job in the field. The new two-day-a-week program should help improve the completion rate for degrees and certificates.

Cost-effectiveness: Is the program cost effective? Does the program require additional resources?

The program is now almost at a break-even point. A large investment has been made over the last five years to purchase new lab equipment. The area now should be able to function without the need for any additional large purchases.

Multicraft, Electronics, and Electricity

Quality: Describe any program improvements since the last program review. What steps need to be taken to update or improve instruction or the program as a whole? How does the program work with local businesses to meet their needs? How does the program faculty remain up-to-date with their professional training and/or certification?

The multicraft program has been completely reorganized since the last program review. The program can now be completed in two years with students attending classes two days a week. This allows students to work and receive on-the-job training three days a week. This change has been well received by local industry and new improvements are now being driven by a very active workforce council from local industry.

The program has had a machine tool emphasis added as requested by local industry.

Program adjunct faculty are hired from local industry and the area lead faculty member is an IEEE member and receives continuing education from seminars and webinars offered by IEEE.

CTE PROGRAM REVIEW SUMMARY REPORT
Required ICCB Program Review Report

Sauk Valley Community College (506)   **Academic Year 2016-2017**

Program Identification Information (only one CIP per template)

6-digit CIP	150303

Career Cluster	Career Pathway
Manufacturing	Maintenance, Installation and Repair

Program of Study	SVCC's Program Title
Electrical, Electronic & Communications Engineering Technology/Technician	A.A.S. 065

Degree or Certificate Type	Check only one
03 – AAS	**X**
20 – Occupational Certificate of 30-50 credits	
30 – Occupational Certificate of 29 or less credits	

SVCC Action

Possible Actions	Check only one
Continued with minor improvements	
Significantly modified	
Discontinued/Eliminated	**X**
Placed on inactive status	
Scheduled for further review	
Other, please specify:	

Need, cost-effectiveness & quality. C*reate a short summary paragraph for each question below.*

Need: Is program enrollment sufficient to justify this program? Are the majority of students in this program completing degrees or certificates? Are the students within this program marketable and employable?

Degree removed from 2017 catalog.

Cost-effectiveness: Is the program cost effective? Does the program require additional resources?

Quality: Describe any program improvements since the last program review. What steps need to be taken to update or improve instruction or the program as a whole? How does the program work with local businesses to meet their needs? How does the program faculty remain up-to-date with their professional training and/or certification?

CTE PROGRAM REVIEW SUMMARY REPORT
Required ICCB Program Review Report

Sauk Valley Community College (506)   **Academic Year 2016-2017**

Program Identification Information (only one CIP per template)

6-digit CIP	470101

Career Cluster	Career Pathway
Manufacturing	Maintenance, Installation and Repair

Program of Study	SVCC's Program Title
Electrical/Electronics Equipment Installation & Repair, General	Electronic Service and Repair (H69)

Degree or Certificate Type	Check only one
03 – AAS	
20 – Occupational Certificate of 30-50 credits	**X**
30 – Occupational Certificate of 29 or less credits	

SVCC Action

Possible Actions	Check only one
Continued with minor improvements	
Significantly modified	
Discontinued/Eliminated	**X**
Placed on inactive status	
Scheduled for further review	
Other, please specify:	

Need, cost-effectiveness & quality. C*reate a short summary paragraph for each question below.*

> *Need: Is program enrollment sufficient to justify this program? Are the majority of students in this program completing degrees or certificates? Are the students within this program marketable and employable?*
>
> Certificate removed from 2017 catalog.
>
> *Cost-effectiveness: Is the program cost effective? Does the program require additional resources?*
>
> *Quality: Describe any program improvements since the last program review. What steps need to be taken to update or improve instruction or the program as a whole? How does the program work with local businesses to meet their needs? How does the program faculty remain up-to-date with their professional training and/or certification?*

Multicraft, Electronics, and Electricity

CTE PROGRAM REVIEW SUMMARY REPORT
Required ICCB Program Review Report

Sauk Valley Community College (506)   **Academic Year 2016-2017**

Program Identification Information (only one CIP per template)

6-digit CIP	470105

Career Cluster	Career Pathway
Manufacturing	Maintenance, Installation and Repair

Program of Study	SVCC's Program Title
Industrial Electronics Technology/Technician	Industrial Electronics (H65)

Degree or Certificate Type	Check only one
03 – AAS	
20 – Occupational Certificate of 30-50 credits	
30 – Occupational Certificate of 29 or less credits	X

SVCC Action

Possible Actions	Check only one
Continued with minor improvements	X
Significantly modified	
Discontinued/Eliminated	
Placed on inactive status	
Scheduled for further review	
Other, please specify:	

Need, cost-effectiveness & quality. C*reate a short summary paragraph for each question below.*

Need: Is program enrollment sufficient to justify this program? Are the majority of students in this program completing degrees or certificates? Are the students within this program marketable and employable?

The Electronics Engineering Technology AAS degree has been eliminated and this certificate now mirrors the requirements in the Multicraft degree for the electronics emphasis. The Multicraft program is growing along with the need for qualified technicians in local industry. Many students have left the program before completing a degree or certificate to take a new job in the field. The new two-day-a-week program should help improve the completion rate for degrees and certificates.

Cost-effectiveness: Is the program cost effective? Does the program require additional resources?

The program is now almost at a break-even point. A large investment has been made over the last five years to purchase new lab equipment. The area now should be able to function without the need for any additional large purchases.

Multicraft, Electronics, and Electricity

Quality: Describe any program improvements since the last program review. What steps need to be taken to update or improve instruction or the program as a whole? How does the program work with local businesses to meet their needs? How does the program faculty remain up-to-date with their professional training and/or certification?

The multicraft program has been completely reorganized since the last program review. This certificate is unchanged except it has now been moved to the multicraft program. The degree program can now be completed in two years with students attending classes two days a week or the certificate can be completed in three semesters. This allows students to work and receive on-the-job training three days a week. This change has been well received by local industry and new improvements are now being driven by a very active workforce council from local industry.

Program adjunct faculty are hired from local industry and the area lead faculty member is an IEEE member and receives continuing education from seminars and webinars offered by IEEE.

CTE PROGRAM REVIEW SUMMARY REPORT
Required ICCB Program Review Report

Sauk Valley Community College (506)   **Academic Year 2016-2017**

Program Identification Information (only one CIP per template)

6-digit CIP	470104

Career Cluster	Career Pathway
Manufacturing	Maintenance, Installation and Repair

Program of Study	SVCC's Program Title
Computer Installation and Repair Technology/Technician	Microprocessor Maintenance (H64)

Degree or Certificate Type	Check only one
03 – AAS	
20 – Occupational Certificate of 30-50 credits	
30 – Occupational Certificate of 29 or less credits	**X**

SVCC Action

Possible Actions	Check only one
Continued with minor improvements	
Significantly modified	
Discontinued/Eliminated	**X**
Placed on inactive status	
Scheduled for further review	
Other, please specify:	

Need, cost-effectiveness & quality. C*reate a short summary paragraph for each question below.*

Need: Is program enrollment sufficient to justify this program? Are the majority of students in this program completing degrees or certificates? Are the students within this program marketable and employable?

Certificate removed from 2017 catalog.

Cost-effectiveness: Is the program cost effective? Does the program require additional resources?

Quality: Describe any program improvements since the last program review. What steps need to be taken to update or improve instruction or the program as a whole? How does the program work with local businesses to meet their needs? How does the program faculty remain up-to-date with their professional training and/or certification?

Multicraft, Electronics, and Electricity

CTE PROGRAM REVIEW SUMMARY REPORT
Required ICCB Program Review Report

Sauk Valley Community College (506)   **Academic Year 2016-2017**

Program Identification Information (only one CIP per template)

6-digit CIP	470105

Career Cluster	Career Pathway
Manufacturing	Maintenance, Installation and Repair

Program of Study	SVCC's Program Title
Industrial Electronics Technology/Technician	Industrial Maintenance Electrician (H94)

Degree or Certificate Type	Check only one
03 – AAS	
20 – Occupational Certificate of 30-50 credits	
30 – Occupational Certificate of 29 or less credits	**X**

SVCC Action

Possible Actions	Check only one
Continued with minor improvements	**X**
Significantly modified	
Discontinued/Eliminated	
Placed on inactive status	
Scheduled for further review	
Other, please specify:	

Need, cost-effectiveness & quality. *Create a short summary paragraph for each question below.*

Need: Is program enrollment sufficient to justify this program? Are the majority of students in this program completing degrees or certificates? Are the students within this program marketable and employable?

The Multicraft program is growing along with the need for qualified technicians in local industry. This certificate contains the electrical emphasis portion of the degree and is an excellent entry point for students that later continue with the degree. Many students have left the program before completing a degree or certificate to take a new job in the field. The new two-day-a-week program should help improve the completion rate for degrees and certificates.

Cost-effectiveness: Is the program cost effective? Does the program require additional resources?

The program is now almost at a break-even point. A large investment has been made over the last five years to purchase new lab equipment. The area now should be able to function without the need for any additional large purchases.

Multicraft, Electronics, and Electricity

Quality: Describe any program improvements since the last program review. What steps need to be taken to update or improve instruction or the program as a whole? How does the program work with local businesses to meet their needs? How does the program faculty remain up-to-date with their professional training and/or certification?

The multicraft program has been completely reorganized since the last program review. This certificate is unchanged except for the removal of photovoltaics and the addition of a basic machine tool course. The degree program can now be completed in two years with students attending classes two days a week or the certificate can be completed in three semesters. This allows students to work and receive on-the-job training three days a week. This change has been well received by local industry and new improvements are now being driven by a very active workforce council from local industry.

Program adjunct faculty are hired from local industry and the area lead faculty member is an IEEE member and receives continuing education from seminars and webinars offered by IEEE.

Multicraft, Electronics, and Electricity

Program Review Committee & Administrative Review Teams Recommendations	
This Program Review is considered complete.	
The following are the recommendations from the Program Review Committee and the Administrative Review Team:	
Signature of the Program Review Committee Chair	

President's Recommendation	
The Program Review has been reviewed.	
The following are the recommendations from the President:	
President's Signature/Date	