



WISCONSIN
INDIANHEAD
TECHNICAL
COLLEGE

AUTOMATED PACKAGING SYSTEMS TECHNICIAN

**Wisconsin Indianhead Technical College
32-454-1 Technical Diploma**

**2013
Program Review
and
Improvement Plan**

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Automated Packaging Systems Technician

32-454-1 Technical Diploma

Financial Aid Eligible

Program Overview

The Automated Packaging Systems Technician program will give students the skills they need to enter a career in the packaging industry. Students will be trained to service and repair a wide variety of packaging equipment and automated systems. This program emphasizes the maintenance and troubleshooting of electrical, mechanical, and fluid power components on packaging equipment including industrial computer controls and programmable logic controllers. Classroom and hands-on lab instruction on packaging machines plus visits to packaging industries are all parts of the program. Students will also participate in the Institute of Packaging Professionals meetings each month.



Campus:
New Richmond

Special Features

This program is unique in the state. An outstanding feature of this program is the reliance on actual automated packaging machinery. Global career opportunities are available. The packaging industry, both locally and nationally, provides unique support to the program by providing scholarships, equipment, and supplies.

Admission Requirements

Students in this program must:

- Complete application form and submit with fee (fee waiver may apply if previously submitted)
- Complete Accuplacer entrance assessment to determine placement (waiver may apply with acceptable alternative test scores and/or postsecondary degree completion)
- Complete admissions interview with a WITC counselor (above requirements should be completed prior to interview)

Student Profile

Automated Packaging Systems Technician students should be able to:

- Learn and apply mechanical principles and repair techniques
- Use good judgment
- Follow procedures carefully
- Handle and manipulate tools and testing equipment
- Assume responsibility for quality work
- Work under pressure
- Stand for long periods of time
- Work from prints and drawings

Preparation for Admission

Students should strive to reach a comfort level in the following courses or skills:

- Basic Math/Algebra/Geometry
- Computer skills
- General science

- English
- Print Reading
- Drafting
- Welding/Metals/Machine Shop

Program Outcomes

Employers will expect Automated Packaging Systems Technician graduates to be able to:

- Demonstrate safe practices and techniques
- Install power transmission components, fluid power components, and automation components
- Maintain power transmission components, fluid power components, and automation components
- Troubleshoot power transmission components, fluid power components, and automation components
- Electrically connect automation and communication components
- Troubleshoot automated control systems
- Create electrical systems drawings and schematics for automated machines

Collegewide outcomes and indicators will also be addressed to develop personal awareness, career effectiveness, and professionalism. See page 5 of the college catalog for a list of collegewide outcomes and indicators.

Career Outlook

Typical positions available after graduation include:

- Packaging Systems Assembler
- Maintenance Technician
- Field Service Technician
- Line Mechanic/Adjuster
- Packaging Systems Operator
- Machine Assembler
- Customer Service Representative

Curriculum

Number	Course Title	Credits
Occupational Specific Courses		
32150300	Applied IT Basics	2
32414358	(A) AC/DC Circuits	3
32414359	(B) AC/DC Circuits ▲	3
32414380	Basic PLCs ▲	3
32420314	Basic Machine Shop	3
32449305	General Safety	1
32454340	Packaging Machine Maintenance ▲	3
32454341	Fluid Power Systems ▲	3
32454342	Packaging Machine Operations ▲	3
32454343	Packaging Machine Rebuilding ▲	5
32454344	Schematics, Prints, and Layouts ▲	2
32454345	Packaging Systems Equipment Control ▲	3
32454347	Electromechanical Componentry ▲	4
32454348	Troubleshooting ▲	2
32454349	Installation of Packaging Machines ▲	5
32454357	Power Transmission Componentry ▲	2
32454359	Packaging Materials/Processes ▲	2
32454362	Processes of Manufacturing - Packaging ▲	2
32454364	Motion Controls ▲	2
		<hr/>
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Occupational Supportive/General Studies Courses¹		
32442307	Welding for Mechanics	2
32801361	Applied Communications 1	2
32801363	Applied Communications 2 ▲	2
32804355	Math 355	3
32804364	Math 364 ▲	2
32809371	Applied Human Relations	2
32890305	Applied Information Resources	2
		<hr/>
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PROGRAM REQUIREMENTS **68**

- ▲ Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.
- ¹ See page 40 for General Studies course descriptions.

Course Descriptions

(See page 40 for General Studies course descriptions)

32150300

Applied IT Basics - Credits: 2

This course provides students with an introduction to basic Information Technology concepts. Students will learn to identify and install basic PC hardware components, install a desktop operating system, and configure and use its utilities and tools. Also covered is understanding basic network communication, including identifying network devices and identifying, creating, and testing common Ethernet cables.

32414358

(A) AC/DC Circuits - Credits: 3

This course is an introduction to electricity. The focus will be on direct current as it is used in industry. It is a blend of the practical and theoretical. You will develop skills in reading schematics, circuit analysis, and electrical measurement techniques.

32414359

(B) AC/DC Circuits - Credits: 3

This course is an introduction to alternating current electricity as used in industry. It is a blend of the practical and theoretical. You will study series and parallel alternating current circuits, transformers, and three-phase alternators and motors. **PREREQUISITE:** 32414358 (A) AC/DC Circuits.

32414380

Basic PLCs - Credits: 3

This course will provide a foundation for working with microprocessor controls. Students will learn the theory and application of electrical principles as they are applied to control systems found in industry. The learner will use trainers and machine components to provide recognition and understanding of modern microprocessor-based control systems. **PREREQUISITE:** 32454345 Packaging Systems Equipment Control.

32420314

Basic Machine Shop - Credits: 3

This lab-based course will provide instruction in shop safety, measuring, print reading, and basic setup and operation of saws, mills, and lathes.

32449305

General Safety - Credits: 1

The student will learn the United States labor law and safe work practices with employee training requirements. The proper use of safety equipment and personal application of safe working habits will be emphasized. Students who work with chemical hazards and use power tools are exposed to a variety of safety concerns that require the use of guidelines and regulations. Medical attention and response to emergencies is also an important procedure to preserve human life and prevent disease.

32454340

Packaging Machine Maintenance - Credits: 3

The study of the care and maintenance of automated packaging systems. You will learn to select and apply basic tools used for maintenance and repair of equipment. You will develop skill in selecting, ordering, and receiving machine components and supplies. **COREQUISITE:** 32449305 General Safety.

32454341

Fluid Power Systems - Credits: 3

This course develops the skills required for the implementation of vacuum, air, and oil used to transmit force for performing useful functions on machines. Students will apply symbols to components and connect components to understand the assembly, operation, and maintenance of fluid power systems. The transmission of force is used in a variety of applications and can be hazardous to individuals who do not understand the related laws of physics. **COREQUISITE:** 32449305 General Safety.

32454342

Packaging Machine Operations - Credits: 3

In this course you will develop skills necessary to operate and adjust machinery in a safe and efficient manner. You will gain experience in product handling and performing assigned tasks on packaging machines. A step-by-step approach to understanding complex tasks from observation and written documents is a basic skill that can be used in a variety of occupations. **COREQUISITE:** 32449305 General Safety.

32454343

Packaging Machine Rebuilding - Credits: 5

The student will learn to plan, organize, and perform various tasks for the assembly or repair of packaging machines. Project work will be assigned for individuals and groups to assemble and disassemble packaging equipment simulating the work environment. Rebuilding machines gives students the opportunity to see applications and problem areas found on custom machinery. **PREREQUISITE:** 32449305 General Safety.

32454344

Schematics, Prints, and Layouts - Credits: 2

This course covers an introduction and use of the many types of engineering drawings used to represent machines. Students will draw sketches and develop interpretation skills required for the correct translation of machine drawings. The ability to understand visualization techniques and symbol usage is a valuable and universal skill as used in everyday life. **PREREQUISITE:** 32449305 General Safety.

32454345

Packaging Systems Equipment Control - Credits: 3

This course gives the students the opportunity to perform the selection, design, installation, and operation of control systems found on automated packaging machines. The student will work with many types of components to gain recognition and skill development in the correct installation of electrical control systems. The modern control system requires specialized skills that are useful for understanding high technology applications such as robotics and climate control. **PREREQUISITE:** 32449305 General Safety.

32454347

Electromechanical Componentry - Credits: 4

This course will develop an understanding of the skills necessary for the selection and application of electromechanical components as used in modern control systems. You will have the opportunity to simulate a control system. You will develop techniques used for identifying failures and malfunctions that occur in control systems. **PREREQUISITES:** 32414359 (B) AC/DC Circuits and 32449305 General Safety.

32454348

Troubleshooting - Credits: 2

The learner will develop the skills necessary for troubleshooting by analyzing the process of problem solving. You will perform troubleshooting procedures on components, machines, and systems. You will learn to think critically as an individual and as a member of a team. Prior knowledge of machine controls is required. **PREREQUISITE:** 32449305 General Safety.

32454349

Installation of Packaging Machines - Credits: 5

The learner will develop skills necessary to plan, install, and perform system checkouts. You will develop a schedule to simulate a machine installation, provide operator training, and develop a team approach to the installation. A variety of packaging machines will be used for the installation projects. A successful installation requires proper planning, teamwork, and the ability to analyze the machine's performance. **PREREQUISITE:** 32449305 General Safety.

32454357

Power Transmission Componentry - Credits: 2

The learner will develop skills necessary to install, maintain, and replace mechanical drive system components. The learner will use machine components to gain an understanding of their use, operation, and maintenance requirements. The correct installation and maintenance is necessary for trouble-free operation. **PREREQUISITE:** 32449305 General Safety.

32454359

Packaging Materials/Processes - Credits: 2

You will learn how to identify equipment types, material properties, and research application history and trends. You will develop skill in identifying materials that are used in various packaging processes. Student presentations and industry tours will be utilized to study current industry issues and trends. **PREREQUISITE:** 32449305 General Safety.

32454362

Processes of Manufacturing - Packaging - Credits: 2

You will learn how to select materials, fabricate parts, and perform quality assurance used in a manufacturing environment. Students will perform a variety of tasks to develop skills necessary for the manufacturing of components. Manufacturing is a fast-paced, highly technical, and globally competitive industry that requires a basic understanding of manufacturing principles. **COREQUISITE:** 32449305 General Safety.

32454364

Motion Controls - Credits: 2

The student will learn the application of motion controllers used in industry that accurately control position or speed. The student will select the correct motion controller from application requirements as used in industry. Performance will include the installation, connection, configuring, and troubleshooting of basic motion controllers. **PREREQUISITE:** 32454347 Electromechanical Componentry.

32442307

Welding for Mechanics - Credits: 2

Instruction in safe setup and operation of plasma cutting (PNC), oxyacetylene cutting (OAC), SMAW (Stick), GMAW (Mig), FCAW, and/or GTAW (Tig) welding in applications related to general industry practices. Selection of appropriate welding processes with a specific emphasis on typical repair situations including metal identification will be stressed.

Gainful employment information is available at this link: <http://www.witc.edu/pgmpages/autopack/career.htm>. This information is provided as a federal requirement in an effort to help students make informed decisions related to the costs and potential employment in a chosen field.

Graduate Employment Information

(WITC Graduate Survey Responses 2010-2011; for most recent data, go to [witc.edu](http://www.witc.edu))

Number of graduates	11	Number employed	11	% employed in WITC district	36%
Number of responses	11	Percent employed	100%	Range of yearly salary	\$30,000-\$62,499
Number available for employment	11	Employed in related field	11	Average yearly salary	\$44,009

career vision

800.243.9482

witc.edu

2013-2014

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TEAM MEMBERSHIP

ACADEMIC PROGRAM REVIEW PROFILE

Program Number& Name	
32-454-1 Automated Packaging Systems Technician	
Program Academic Dean	Title/Location
Nancy Cerritos	Academic Dean, New Richmond
Team Lead(s)	Title/Location
Kevin Lipsky	Packaging Instructor/NR
Joe Krear	Packaging Instructor/NR
Team Members	Title/Location
Kevin Salmon	Math Instructor/NR
Jessica Eccles	Manager of Enrollment Services/NR
Tom Findlay	Counselor/NR
Jamie Bratsch	Advisory committee member

Program Information:		
Capacity (new students admitted/year):		16-18
Number of Faculty:	FT: 2	PT:
Statewide Curriculum:	Yes?	No? No – unique program
Number of Technical Studies Courses in each of the following delivery modes: (there may be duplication for courses offered in multiple modes)		
	<i>Classroom:</i>	19
	<i>Online:</i>	0
	<i>ITV/IP:</i>	0
	<i>In Person/Web Blended:</i>	0

Program Accredited by:	NA
Date of Last Accreditation	
Date of Next Accreditation	
Is a visit required? If so, when is the next visit?	
Program Licensed by:	NA
Date of Last Licensing:	
Date of Next Licensing:	
Is a visit required? If so, when is the next visit?	
Please list other program memberships:	NA

Note: The accreditation, licensing, and membership information listed above will be listed in the annual WITC Fact Book.

SELF-STUDY REPORT

SELF-STUDY SUMMARY REPORT

Program Information	
Program Name: Automated Packaging Systems Technician	Team Chair: Kevin Lipsky/Joe Krear
Academic Dean: Nancy Cerritos	Divisional Dean: Randy Deli
Process Used to Complete the Self-Study	
Meeting format (in-person, IP, conference calls etc.)	Face to face meetings
Number of meetings	2
How was the self-study handled? (as a group, assigned to individuals to report back to group, etc.)	The instructor and dean met for a planning meeting and completed a draft of the self-study. Then a face-to-face meeting with the self-study team to complete the self-study and do team ratings.
Additional comments:	Although we went through all the steps and pursued each element thoroughly, we found that very little had changed since the last review and we have not had enough time to evaluate our last review's effects.
Summary of Findings	
As you completed this selfstudy section of the program review, what areas "stand out" in your program? Please explain.	Our curriculum has been improved by the addition of an IT basics class and change in general studies classes as well as the new Applied Info Resources. Initial observations of the applied communication courses along with anecdotal evidence from the instructors, are indicating that student satisfaction is higher
What has surprised you? Please explain.	How little has changed since the last review. Many things were in pretty good shape and continue to be in good shape.
List two or three of the items identified through your self-study that you will focus on to make improvements to your program.	We will be working on assessment more than anything this cycle as there is a system wide push for more documentation of assessment practices. This will include assessment at the course, program, and college level- and TSA.
When/where in your program will you implement these improvements?	Some will be throughout the program- many will be in the last semester of the program.

<p>What methods (direct or indirect) will you use to assess the success of this implementation?</p>	<p>Focus groups with the students in the second and fourth semesters - and maybe the first, to get initial reactions as well as later reactions to some of the new assessment practices that will be part of our assessment plan. We will also be implementing our TSA assessment pieces- those results will be used as well.</p>
<p>What new outcomes or benchmarks do you hope to achieve through these recommended changes?</p>	<p>Perhaps our TSA documentation will be a best practice for unique programs.</p>
<p>Additional comments:</p>	

SELF-STUDY CATEGORY RESULTS

Program and Category			
Program: Automated Packaging Technician Category: WITC Program Statistics <i>(fill out a Self-Study Category Sheet for each section of the self-study. (Additional sections may be added if desired))</i>			
PLUSES (Strengths)		DELTAS (Opportunities)	
<ul style="list-style-type: none"> -Enrollment is steady for the last three years. -Average graduate salaries are higher than WITC average. -Graduate satisfaction is generally good. -Retention fall to spring is on a rising trend. -Graduate employed related is consistently high. 		<ul style="list-style-type: none"> -Enrollment can't grow as program is at capacity. -Although retention is rising, it is lower than it was last program review. -Number of graduates was good in 2011-2012 but not the two years before. 	
Select one PLUS item and explain the root cause:	Graduate employed related is generally high because the program has a broad range of skills and there are numerous opportunities for related employment.		
Select one DELTA item and explain the root cause:	Program is at capacity - there is no more room or instructor time for more students.		
What items in this category MUST be addressed on our improvement plan?			
What items in this category MIGHT be addressed on the improvement plan?	Retention statistics: Could look at program admittance scores and correlation between that and student success.		
What items in this category may be considered a BEST PRACTICE OR INNOVATION?			
Team Rating			
Please indicate by an (X) the team rating of your program on this category.			
<i>All areas need improvement</i>	<i>Some areas meet expectations, but most areas need improvement</i>	<i>All areas meet expectations—few areas need improvement</i>	<i>Exemplary—all areas exceed expectations—use as a model for other programs</i>
		X	
Additional Comments: (optional)			

SELF-STUDY CATEGORY RESULTS

Program and Category	
Program: Automated Packaging Technician Category: Curriculum <i>(fill out a Self-Study Category Sheet for each section of the self-study. (Additional sections may be added if desired))</i>	
PLUSES (Strengths)	DELTAS (Opportunities)
<ul style="list-style-type: none"> -Curriculum is strong in basic competencies. -Program outcomes are good and have been validated. -TSA Phase I is approved. -Checklists are accurate and currently updated. -Pre-Requisites listed are needed. -Some courses now have BB component. -Instructors are aware of learning styles and address in instruction. -Most course materials are well-written and work well for the program. -Books are carefully chosen with an eye to cost as well as function, multi-class books being preferred when possible. -Have embedded Critical Thinking Collegewide outcomes. -WIDS is current for most courses. -WIDS analyzer is complete. -Implemented Applied Info Resources. -Added IT basics in the last modification. -General studies courses were changed to the technical diploma courses in the last modification (as a result of program review data). -Curriculum aligned with national industry standards. 	<ul style="list-style-type: none"> -Course materials could be improved in some classes. -Course content needs to be built in BB classes. -Individual courses have not been updated recently. -Catalog page/web page could use updating. -Have not included other collegewide outcomes. -Do not have formal plan for updating curriculum. -Funding is limited for large curriculum changes.

Select one PLUS item and explain the root cause:	Curriculum is strong in basic competencies due to the involvement of a committed Advisory Committee.		
Select one DELTA item and explain the root cause:	Have not included other collegewide outcomes as the assessments have not yet been developed for them. We do not have formal plans for updating curriculum as other things have been of higher priority (TSA).		
What items in this category MUST be addressed on our improvement plan?	TSA Phase II, Collegewide Outcomes.		
What items in this category MIGHT be addressed on the improvement plan?	Catalog page and web page need updating.		
What items in this category may be considered a BEST PRACTICE OR INNOVATION?			
Team Rating			
Please indicate by an (X) the team rating of your program on this category.			
<i>All areas need improvement</i>	<i>Some areas meet expectations, but most areas need improvement</i>	<i>All areas meet expectations—few areas need improvement</i>	<i><u>Exemplary</u>—all areas exceed expectations—use as a model for other programs</i>
		X	
Additional Comments: (optional)			

SELF-STUDY CATEGORY RESULTS

Program and Category	
Program: Automated Packaging Technician Category: Assessment of student learning <i>(fill out a Self-Study Category Sheet for each section of the self-study. (Additional sections may be added if desired))</i>	
PLUSES (Strengths)	DELTAS (Opportunities)
<ul style="list-style-type: none"> -TSA phase one is approved and rubrics are under development. -Program outcomes are broken down into concise steps for assessment using a checklist. -Assessing Critical Thinking outcome. -Assessing Math outcome. -Much of the assessment in the program courses is performance based and authentic. -There is sensitivity to learning styles in the assessments, in some courses. 	<ul style="list-style-type: none"> -We have not had adequate data yet to support our efforts with program outcome assessment. -All program outcomes are not being assessed yet. -Only working with two collegewide outcomes. -Students do not always know how they are doing in some courses - assessment is not transparent. -Rubrics not always available to the students or used consistently.
Select one PLUS item and explain the root cause:	TSA phase one is approved. We were the pilot for unique programs.
Select one DELTA item and explain the root cause:	Rubrics not always available to the students or used consistently. They have not been developed for every course and some are unwieldy and need to be modified.
What items in this category MUST be addressed on our improvement plan?	TSA, program outcomes and collegewide outcomes.
What items in this category MIGHT be addressed on the improvement plan?	Improving course rubrics and assessments.
What items in this category may be considered a BEST PRACTICE OR INNOVATION?	TSA for unique programs.

Team Rating

Please indicate by an **(X)** the team rating of your program on this category.

<i>All areas need improvement</i>	<i>Some areas meet expectations, but most areas need improvement</i>	<i>All areas meet expectations—few areas need improvement</i>	<i><u>Exemplary</u>—all areas exceed expectations—use as a model for other programs</i>
	X		
Additional Comments: (optional)			

SELF-STUDY CATEGORY RESULTS

Program and Category	
Program: Automated Packaging Technician Category: Advisory Committees <i>(fill out a Self-Study Category Sheet for each section of the self-study. (Additional sections may be added if desired)</i>	
PLUSES (Strengths)	DELTAS (Opportunities)
<ul style="list-style-type: none"> -Membership revised last year and new members added. -All required topics are covered on the agenda and minutes are taken and dispersed. -Committee suggests equipment. -Members of the committee sometimes facilitate donations. -Help in referring potential employment. -Assist in program review. -Have standing co-chairs to ensure one is always at a meeting. 	<ul style="list-style-type: none"> -Opportunity to expand membership exists with Twin Cities businesses, specifically medical devices and drug companies. -Do not always meet twice a year. -Hard to keep committee engaged when no items on agenda require voting. -Rarely have Student Service or General Studies attendance. -Quorums not always met.
Select one PLUS item and explain the root cause:	Have standing co-chairs. Both are graduates of the program and are committed to supporting and improving the program.
Select one DELTA item and explain the root cause:	Rarely have Student Service or General Studies attendance as there is no process to include them, other than a sign-up sheet.
What items in this category MUST be addressed on our improvement plan?	
What items in this category MIGHT be addressed on the improvement plan?	Looking to the medical device industry for possible extra members.
What items in this category may be considered a BEST PRACTICE OR INNOVATION?	Having two standing chairs to enable at least one of them to attend.

Team Rating

Please indicate by an **(X)** the team rating of your program on this category.

<i>All areas need improvement</i>	<i>Some areas meet expectations, but most areas need improvement</i>	<i>All areas meet expectations—few areas need improvement</i>	<i><u>Exemplary</u>—all areas exceed expectations—use as a model for other programs</i>
		X	
Additional Comments: (optional)			

SELF-STUDY CATEGORY RESULTS

Program and Category	
Program: Automated Packaging Technician Category: Equipment and Facilities <i>(fill out a Self-Study Category Sheet for each section of the self-study. (Additional sections may be added if desired)</i>	
PLUSES (Strengths)	DELTAS (Opportunities)
<ul style="list-style-type: none"> -Equipment is packaging equipment either donated or purchased for the program; much is donated. -Student work is done on equipment not simulators. -Outdated equipment is recycled into other courses or disposed of. -New equipment and updates are purchased through the planning cycle. -Advisory Committee input is considered when making purchases. -Program faculty puts hours and hours into researching, specifying and working with vendors to purchase the right equipment at a good cost (ensuring good purchases). 	<ul style="list-style-type: none"> -One half of the shop has poor lighting. -Shop has inadequate electrical facilities. -Classroom is cramped. -Only one classroom - sometimes both first and second years need at the same time. -No facilities for storage of off-semester equipment. -Program faculty puts hours and hours into researching, specifying and working with vendors to purchase the right equipment at a good cost(time is a precious resource). -Don't have "purpose-designed" facility.
Select one PLUS item and explain the root cause:	Student work is done on equipment. To provide for authentic and uniform assessment, all students are assessed on the same equipment.
Select one DELTA item and explain the root cause:	Most of the deltas are funding related - or lack thereof.
What items in this category MUST be addressed on our improvement plan?	
What items in this category MIGHT be addressed on the improvement plan?	
What items in this category may be considered a BEST	

PRACTICE OR INNOVATION?			
Team Rating Please indicate by an (X) the team rating of your program on this category.			
<i>All areas need improvement</i>	<i>Some areas meet expectations, but most areas need improvement</i>	<i>All areas meet expectations—few areas need improvement</i>	<i><u>Exemplary</u>—all areas exceed expectations—use as a model for other programs</i>
		X	
Additional Comments: (optional)			

SELF-STUDY CATEGORY RESULTS

Program and Category	
Program: Automated Packaging Technician Category: Staff Development and Program Innovation	
PLUSES (Strengths)	DELTAS (Opportunities)
<ul style="list-style-type: none"> -Both program instructors are life-long learners. -Faculty has strong affiliations with PMMI and IOPP industry groups. -One faculty member is affiliated with WACTE. -All faculty have annual performance reviews with updated goals and ILP's. -Staff have the opportunity to request development funds for personal goals. -Faculty attend trade shows and bring students every year. -Staff utilize free training opportunities when they are available. 	<ul style="list-style-type: none"> -Insufficient funds for some training opportunities - some are EXTREMELY expensive. -Opportunities for externships haven't materialized. -Staff time is limited for any professional development.
Select one PLUS item and explain the root cause:	Staff utilize free training opportunities when they are available. They are both committed to the program and to their own learning goals.
Select one DELTA item and explain the root cause:	Funding and time are not always available. Flexible days are scheduled and funding is limited.
What items in this category MUST be addressed on our improvement plan?	
What items in this category MIGHT be addressed on the improvement plan?	Staff continue to train selves through free opportunities and trade/industry journals.
What items in this category may be considered a BEST PRACTICE OR INNOVATION?	

Team Rating

Please indicate by an **(X)** the team rating of your program on this category.

<i>All areas need improvement</i>	<i>Some areas meet expectations, but most areas need improvement</i>	<i>All areas meet expectations—few areas need improvement</i>	<i><u>Exemplary</u>—all areas exceed expectations—use as a model for other programs</i>
	X		
Additional Comments: (optional)			

SELF-STUDY CATEGORY RESULTS

Program and Category	
Program: Automated Packaging Technician Category: Collaboration Across the College <i>(fill out a Self-Study Category Sheet for each section of the self-study. (Additional sections may be added if desired))</i>	
PLUSES (Strengths)	DELTAS (Opportunities)
<ul style="list-style-type: none"> -General studies faculty and program faculty work extremely well together, customizing where possible and collaborating when appropriate. -Meet with General Studies as needed or just in time (JIT). - Collaborate with supportive course instructors well - MT, welding and IT. -Student services staff has a good understanding of the program and good working relationships with all instructors. -Good ties to many area industries and good working relationship with continuing education. -Dean is on campus and available often. -Standing weekly meetings with dean and instructors. -Dean has good understanding of the program. -Genuine respect between instructors and deans both academic and divisional. 	<ul style="list-style-type: none"> -When Con. Ed opportunities arise, not always instructor time to accommodate industry needs. -General Studies courses not always able to customize content. -Lack of awareness of program at other campuses.
Select one PLUS item and explain the root cause:	Program faculty work well with General Studies instructors. All instructors are genuinely concerned with student success and seek out opportunities.
Select one DELTA item and explain the root cause:	Lack of awareness of program at other campuses. This has not been pursued this in the past.
What items in this category MUST be addressed on our improvement plan?	

What items in this category MIGHT be addressed on the improvement plan?	Lack of awareness of program at other campuses.		
What items in this category may be considered a BEST PRACTICE OR INNOVATION?	Dean is on campus.		
Team Rating Please indicate by an (X) the team rating of your program on this category.			
<i>All areas need improvement</i>	<i>Some areas meet expectations, but most areas need improvement</i>	<i>All areas meet expectations—few areas need improvement</i>	<i><u>Exemplary</u>—all areas exceed expectations—use as a model for other programs</i>
		X	
Additional Comments: (optional)			

Perkins Data Review

PERKINS DATA REVIEW

(replaces QRP Analysis for 2013 reviews only)

Program and Category	
Program: Automated Packaging Systems Technician Category: Perkins Data Review	
PLUSSES (Strengths)	DELTAS (Opportunities)
<p>-1P1-82.35 Average of three years of course completion exceeds the benchmark of 82.22.</p> <p>-1P2 General studies completion is slightly up from last year, from 71.43 to 73.33.</p> <p>-2P1 Degree attainment surpasses the benchmark of 55 in all three years, with an average of 70.59.</p> <p>-2P1+3P1 Degree attainment + retention % is at or above benchmark of 66.78.</p> <p>-4P1 Average of 91.30 is above target of 90.41.</p>	<p>-1P1 Course completion is trending downward: 2012 was 73.33 (target 82.22).</p> <p>-1P2 General studies course completion does not meet the benchmark of 83.71, except for 2010.</p> <p>-2P1 Degree attainment is trending down over the three years, dropping 11%.</p> <p>-2P1+3P1 Degree attainment + retention % is trending downward over the three year period, dropping about 10%.</p>
Select one PLUS item and explain the root cause:	<p>General studies course completion is slightly up in 2012. We changed from associate level courses to applied courses and 2012 is the first year we might have noticed some effect.</p>
Select one DELTA item and explain the root cause:	<p>Degree attainment is trending down over the three years. With the economy picking up, students are jobbing out. In addition, a number of students have run out of TAA funding and have not completed their degree.</p>
What items in this category MUST be addressed on our improvement plan?	<p>Degree attainment will be addressed on our improvement plan.</p>
What items in this category MIGHT be addressed on the improvement plan?	
What items in this category may be considered a BEST PRACTICE OR INNOVATION?	

FUTURE TRENDS AND EXTERNAL FACTORS

Program	Automated Packaging Systems Technician
Future Trends	
•	Intersection and collaboration of ITNS, IACN and packaging where curriculum competencies mesh.
•	Sharing of equipment with IACN, particularly where network equipment it required.
•	Continued growth in industry and particularly in technology.
•	More integration of equipment as companies try to minimize number of “touches” of product (maintain control of line/product).
•	Continued increase in automation.
•	Reduction in secondary packaging and interest in ecologically friendly materials.
External Factors	
•	Continued shortage of skilled technicians.
•	Increased interest on the part of manufacturing to partner with education to fill the vacancies being left by retirements.
•	Push for career pathways stackable certificates and dual credits.
•	Environmental regulations.
•	
Employment Trends	
Local	Local jobs are available, plus Bosch, the biggest packaging plant in the area, is continuing to grow and looking to us for collaboration and graduates.
•	Due to the versatile graduate produced by the program, local employment as maintenance technicians is frequently available.
State	Need for graduates is always high in many areas of the state if students are willing to move.
•	
•	

2013 Improvement Plan

ACADEMIC PROGRAM IMPROVEMENT PLAN

PROGRAM:	Automated Packaging Systems Technician			
Defined Outcome: TSA is completed and in place	Perkins? no	Responsibility	Timeline	Resources
Action Plan/Action Items: <i>TSA Phase II is approved at state level.</i> <i>Instructors create portfolio and plan for it.</i> <i>Assessments/artifacts are chosen for each program outcome.</i> <i>Plan for assessment is created.</i> <i>Instructors divide assessment responsibilities and align with appropriate courses.</i> <i>TSA assessments are completed for each packaging student.</i>		Instructors Dean	Fall 2013-Spring 2015	Cindy King
WTCS QRP Indicator Name & Number: (from those potential solutions selected from the WTCS QRPDS Analysis)				
Update: (A mid-year and year-end update will be required each year during implementation.) May 2014: We are awaiting Phase II approval and cannot move forward until we have heard. (we expect it to be approved) December 2014: Phase II was approved and we will be assessing TSA in the spring semester and forwarding results. May 2015: Results of TSA were submitted for review and to be sent to state.				

ACADEMIC PROGRAM IMPROVEMENT PLAN

PROGRAM:	Automated Packaging Systems Technician			
<i>Defined Outcome:</i> Catalog page is current and updated	<i>Perkins?</i> no	Responsibility	Timeline	Resources
<i>Action Plan/Action Items:</i> Review both catalog page and web page at fall Advisory Committee meetings. Add newer photos. Seek testimonials of recent graduates. Complete each fall before October 1.		Instructors Dean Advisory Committee	Fall 2013 Fall 2014 Fall 2015	
WTCS QRP Indicator Name & Number: (from those potential solutions selected from the WTCS QRPDS Analysis)				
Update: (A mid-year and year-end update will be required each year during implementation.) May 2014: We began reviewing the catalog page and the web page at last fall's committee meeting and will repeat in the fall of 2014. December 2014: We forgot to do this at an otherwise very productive engaged advisory committee meeting. May 2015: This is a fall activity. Will complete in the fall at the advisory committee meeting. December 2015: We reviewed catalog and web page at the fall advisory committee.				

ACADEMIC PROGRAM IMPROVEMENT PLAN

PROGRAM:	Automated Packaging Systems Technician			
Defined Outcome:	Perkins?	Responsibility	Timeline	Resources
Current and updated program course curriculum	no			
<p>Action Plan/Action Items:</p> <p><i>Create plan for updating curriculum.</i></p> <p><i>Transition to WEB version of WIDS.</i></p> <p><i>Add BB elements to classes and enhance where currently exists.</i></p> <p><i>Align with program and collegewide outcomes.</i></p> <p><i>Update WIDS analyzer.</i></p>		<p>Instructors</p> <p>Dean</p> <p>Curriculum Designer</p>	<p>Fall 2013-Fall 2014</p>	<p>Curriculum office</p>
<p>WTCS QRP Indicator Name & Number:(from those potential solutions selected from the WTCS QRPDS Analysis)</p>				
<p>Update: (A mid-year and year-end update will be required each year during implementation.)</p> <p>May 2014: Many of these steps were completed. We will need to work with Andrea to make the transition and will do that over the next two years. We have completed the WIDS Analyzer as a step in seeking Phase II approval. One of the instructors in working with BB- We are going to work on one class at a time and enhance that. We needed to narrow the scope.</p> <p>December 2014: Are working to transition to WIDS on the Web. Phase II was approved.</p> <p>May 2015: More work on Blackboard needed - not being used as effectively as is possible. Completed WIDS analyzer as part of Phase 2 approval. December 2015: Completed</p>				

ACADEMIC PROGRAM IMPROVEMENT PLAN

PROGRAM:	Automated Packaging Systems Technician			
Defined Outcome: Improved Advisory Committee Meetings	Perkins? no	Responsibility	Timeline	Resources
Action Plan/Action Items <i>Offer choices of meeting times, maybe using a web voting app.</i> <i>Ensure agenda has at least one solid discussion topic.</i> <i>Invite specific General Studies and Student Services personnel to ensure their presences.</i> <i>Expand membership of committee.</i>		Instructors Dean	Fall 2013-Fall 2014	Advisory Committee
WTCS QRP Indicator Name & Number: (from those potential solutions selected from the WTCS QRPDS Analysis)				
<p>Update: (A mid-year and year-end update will be required each year during implementation.)</p> <p>May 2014: We are looking at the membership and attempting to find someone from medical or pharmaceutical industry. We will implement the other steps at our fall advisory committee meeting.</p> <p>December 2014: Fall advisory committee was well attended. A counselor attended. We have not yet found anyone from the medical or pharmaceutical industry.</p> <p>May 2015: No spring advisory committee meeting.</p> <p>December 2015: We had a successful fall meeting with Quorum met and a counselor and a General Studies instructor in attendance.</p>				

ACADEMIC PROGRAM IMPROVEMENT PLAN

PROGRAM:	Automated Packaging Systems Technician			
Defined Outcome: Improve degree attainment percentage by 11%	Perkins? yes	Responsibility	Timeline	Resources
Action Plan/Action Items: <i>Investigate course pass rates and identify barrier courses.</i> <i>Arrange periodic meetings with GS instructors to monitor student progress.</i> <i>Implement proactive advising measures.</i> <i>Meet annually with Student Services to update program changes and needs.</i>		Instructors Dean GS Instructors	Fall 2013-Fall 2015	Institutional Research
WTCS QRP Indicator Name & Number: (from those potential solutions selected from the WTCS QRPDS Analysis)				
Update: (A mid-year and year-end update will be required each year during implementation.) May 2014: We followed all of our action steps and increased out degree attainment rate form 66.67 in 2012 to 84.62 in 2013, surpassing our goal. We also achieved 100% job placement percentage. December 2014: will continue annual meetings with SS and continue all the above measures. May 2015: Continued. December 2015: Continued.				

ACADEMIC PROGRAM IMPROVEMENT PLAN

PROGRAM:	Automated Packaging Systems Technician			
Defined Outcome: Create embedded certificate or diploma	Perkins? no	Responsibility	Timeline	Resources
Action Plan/Action Items: <i>Meet and discuss possible options with focus group.</i> <i>Garner Advisory Committee validation of employability potential.</i> <i>Embed certificate with proper approvals.</i>		Instructors Dean Advisory Committee	Fall 2013-Fall 2015	Curriculum Office
WTCS QRP Indicator Name & Number: (from those potential solutions selected from the WTCS QRPDS Analysis)				
<p>Update: (A mid-year and year-end update will be required each year during implementation.)</p> <p>May 2014: This program does not seem like a good candidate for embedded certificates/diplomas as all the skills are needed for employability. We will continue to explore.</p> <p>December 2014: Possibly could have an electro-mechanical diploma, but need to explore further.</p> <p>May 2015: Submitted possible one year electro-mechanical diploma, but have not heard yet from Curriculum Office.</p> <p>December 2015: This was put in planning for NEXT year, but got moved up due to a proposed grant. We will have to have an advisory committee meeting in the spring.</p>				