## New Program Request Form

### General Information

<table>
<thead>
<tr>
<th>Institution submitting proposal</th>
<th>Garden City Community College</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name, title, phone, and email of person submitting the application</strong> <em>(contact person for the approval process)</em></td>
<td>Marc Malone, Vice President for Instructional Services, 620-276-9597 <a href="mailto:marc.malone@gcccks.edu">marc.malone@gcccks.edu</a></td>
</tr>
<tr>
<td><strong>Identify the person responsible for oversight of the proposed program</strong></td>
<td>Chuck Pfeifer, Dean of Tech. Ed. and Workforce Development 620-276-9521 <a href="mailto:chuck.pfeifer@gcccks.edu">chuck.pfeifer@gcccks.edu</a></td>
</tr>
<tr>
<td><strong>Title of proposed program</strong></td>
<td>Robotics and Mechatronics Technology</td>
</tr>
<tr>
<td><strong>Proposed suggested Classification of Instructional Program (CIP) Code</strong></td>
<td>15.0405 Robotics Technology</td>
</tr>
<tr>
<td><strong>CIP code description</strong></td>
<td>A program that prepares individuals to apply basic engineering principles and technical skills in support of engineers and other professionals engaged in developing and using robots. Includes instruction in the principles of robotics, design and operational testing, system maintenance and repair procedures, robot computer systems and control language, specific system types and applications to specific industrial tasks, and report preparation.</td>
</tr>
<tr>
<td><strong>Standard Occupation Code (SOC) associated to the proposed program</strong></td>
<td>17-3024 Electro-Mechanical Technicians</td>
</tr>
<tr>
<td><strong>SOC description</strong></td>
<td>Operate, test, maintain, or adjust unmanned, automated, servomechanical, or electromechanical equipment. May operate unmanned submarines, aircraft, or other equipment to observe or record visual information at sites such as oil rigs, crop fields, buildings, or for similar infrastructure, deep ocean exploration, or hazardous waste removal. May assist engineers in testing and designing robotics equipment.</td>
</tr>
<tr>
<td><strong>Number of credits for the degree and all certificates requested</strong></td>
<td>Certification Level B requiring 36 credit hours AAS requiring 65 credit hours</td>
</tr>
<tr>
<td><strong>Proposed Date of Initiation</strong></td>
<td>Fall 2023</td>
</tr>
<tr>
<td><strong>Specialty program accrediting agency</strong></td>
<td>None at this time.</td>
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</table>
| **Industry certification** | Smart Automation Certification Alliance (SACA)  
  - C103 Certified Industry 4.0 Associate III – Robot Systems Operation  
  - C-358 Autonomous Mobile Robot Systems I  
  - C-363 Machine Vision Systems I |
Signature of College Official _______________________________ Date 12/8/22
Signature of KBOR Official ________________________________ Date ________
Narrative
Completely address each one of the following items for new program requests. Provide any pertinent supporting documents in the form of appendices, (i.e., minutes of meetings, industry support letters, CA1-1a form).

Institutions requesting subordinate credentials need only submit the following sections:
1) General Information, 2) Program Rationale, 3) Complete catalog descriptions (including program objectives) for the proposed program, 4) List by prefix, number, title, and description all courses (including prerequisites) to be required or elective in the proposed program, 5) List any pertinent program accreditation available (rationale for seeking or not seeking accreditation and plan to achieve accreditation), and 6) Program Approval at the Institution Level.

Program Rationale
• Provide an overall explanation and background surrounding the development of the proposed program. Include where the idea came from, who was involved, and why the program is needed.

In 2020 Garden City Community College applied for and received funding for a Title III grant through the United States Department of Education. The purpose of the grant is to support STEM education, specifically in underserved racial/ethnic populations. This grant supports the creation of three new high-need programs, including this application for a Robotics and Mechatronics Technology program. The new programs seek to increase the number of Hispanic and low-income students earning STEM degrees.

Program Description
• Provide a complete catalog description (including program objectives) for the proposed program.

**Associate of Applied Science - 65 Credit Hours**
The Associate of Applied Science degree in Robotics and Mechatronics Technology is a cross disciplinary program that focuses on automation and control of mechanical systems. The program emphasizes the development of skills in the areas of electronics, mechanics, and computer science. Students get a hands-on experience in working with physical implements (motors, programmable logic controllers, pneumatics), connecting those implements to electrical (AC and DC) systems, and working with the fundamentals of computer programming for automation. Students also take robotics classes allowing students to set up and integrate robotics systems for small- and large-scale operations. Through the Smart Automation Certification Alliance (SACA), students will have the opportunity to earn industry certificates which validate their learning and can lead to additional opportunities in the workforce. The AAS includes general education courses that emphasize effective communication, problem-solving, and instilling work ethic.

PLO 1: Install, configure, and troubleshoot automation technology including but not limited to robotics, AC and DC motors, circuitry, and PLC’s.
PLO 2: Develop systems that utilize actuators, sensors, and control to automate a process
PLO 3: Analyze production processes to determine opportunity and need for robotics integration
PLO 4: Determine capabilities and limitations of robotics and automation technology for specific application.
PLO 5: Follow safety practices and perform risk assessment on robotic technology
Certificate B – 36 credit hours

The Certificate in Robotics and Mechatronics Technology is a cross-disciplinary program that focuses on automation and control of mechanical systems. The program emphasizes the development of skills in the areas of mechanics and computer science. Students get a hands-on experience in working with physical implements (motors, programmable logic controllers) and working with the fundamentals of computer programming for automation. Students also take robotics classes allowing students to set up and integrate robotics systems for small- and large-scale operations. Through the Smart Automation Certification Alliance (SACA), students will have the opportunity to earn industry certificates which validate their learning and can lead to additional opportunities in the workforce.

PLO 1: Install, configure, and troubleshoot automation technology including but not limited to robotics, AC and DC motors, circuity, and PLC’s.

PLO 2: Develop systems that utilize actuators, sensors, and control to automate a process

PLO 3: Analyze production processes to determine opportunity and need for robotics integration

PLO 4: Determine capabilities and limitations of robotics and automation technology for specific application.

PLO 5: Follow safety practices and perform risk assessment on robotic technology

PLO 6: Communicate technical information and solutions effectively both verbally and in writing.

• List and describe the admission and graduation requirements for the proposed program.

There are no specific entrance requirements for this program. Institutional requirements are described below:

Institutional Requirements:
1. Application for admission
2. Official Highschool/home-school transcript, including final grades, grade point average, class ranking (if available), and graduation date, or an official copy of GED scores.
3. Official transcript from each university/college attended
• All first-time students are required to take a placement assessment through the Mary Jo Williams Assessment Center located in the SCSC.
• Applicants are strongly advised to take the ACT assessment for scholarship, advising, and counseling purposes (GCCC’s ACT code is 14714)
• Official transcripts must be mailed by the issuing institution or transmitted electronically directly to the GCCC admissions office. Hand-carried, faxed, or emailed copies are not acceptable.
• A complete medical form is required for all students in the nursing, cosmetology programs, and for residential hall residents and athletic program participants. Students in these areas will be advised according to departmental policy and the appropriate forms will be provided.

4. Student health requirements – Tuberculosis (TB)
In accordance and compliance with the TB Risk Assessment Law (Kansas Statute K.S.A. 65-129e), all Garden City Community College students who have traveled, resided in for more than three months, or were born in any country where Tuberculosis (TB) is endemic as identified by the Centers for Disease Control and Prevention must provide TB test results prior to attending class/completing enrollment. Any student who is not in compliance with the applicable State of Kansas Statute is not eligible to attend classes, enroll for classes, or obtain an official academic transcript or records until the student is compliant with the requirements. All students must complete the TUBERCULOSIS SCREENING QUESTIONNAIRE and if required, obtain a completed/approved Certificate of Health Form from the Finney County Health Department or other approved Health Care Provider.

5. Graduation requirements:
Students who successfully complete the A.A.S. degree will complete 65 credit hours with a grade of “D” or higher in the appropriate courses as described below.
Students who successfully complete the Certificate B will complete 36 credit hours with a grade of “D” or higher in the appropriate courses as described below.

Demand for the Program
• Using the Kansas Department of Labor’s Long Term Occupational Outlook, (https://klic.dol.ks.gov) identify employment trends and projections: occupational growth, occupational replacement rates, estimated annual median wages, and typical education level needed for entry.

The Kansas Department of Labor’s occupational overview for Electro-Mechanical Technicians (17-3024) indicates 195 current job postings in the state as of November 10, 2022. The 2020-2030 long-term occupational projections does not have data available on occupational growth, replacement rates, est. Annual mean wages are $51,659, and annual median wages are $52,651. This same long-term data indicates typical required education is an Associate’s Degree. Data compiled from public sources by JobsEQ, a third-party company similar to EMSI Burning Glass/Lightcast, estimates 104 annual openings for this occupation.
• Show demand from the local community. Provide letters of support from at least three potential employers, which state the specific type of support they will provide to the proposed program.

Locally, letters of support from industry partners such as Dairy Farmers of America, Sunflower Electric, and Empirical Foods note their use of “the latest and advanced automation technologies” in their operations. Letters of support from these industry partners are included in the Appendix of this application.

• If the program/coursework will be made available to high school students, provide letters of support from local high schools and/or districts that intend to participate.

We have obtained a letter of support from Garden City High School documenting their support of this program and the potential for dual-credit opportunities for their students.

• Describe how the Perkins Comprehensive Local Needs Assessment supports the program initiation.

The most recent Comprehensive Regional Needs Assessment completed in February 2022 indicates that “schools in the region desire to provide students with ‘advanced’ skills to allow them opportunities beyond entry-level work.” (p 11). Local food manufacturers are interested in this program because their existing industrial processes all involve highly mechanized, automated, computer-based, and web-connected processing systems. This program serves as a bridge between the mechanized worlds and the worlds of computer-enabled, web-based production controls—jobs that employers attest exist in our area. Empirical Foods, for example, is a technology-based company that specializes in ground beef production. Empirical is building a plant in Garden City that will employ over 500 people from the region, and many of those employees will need to be trained in areas such as robotics, mechatronics, electronics, and more.

• Describe/explain any business/industry partnerships specific to the proposed program.

If a formal partnership agreement exists, agreement explaining the relationship between partners and documenting support to be provided for the proposed program must be submitted to the Board office independent from the CAI materials for review purposes. The agreement will not be published or posted during the comment period.

No formal business/industry partnerships exist at this time, but GCCC has worked with Empirical Foods and Tyson as supportive partners for future collaboration.

**Duplication of Existing Programs**

• Identify similar programs in the state based on CIP code, title, and/or content. For each similar program provide the most recent K-TIP data: name of institution, program title, number of declared majors, number of program graduates, number of graduates exiting the system and employed, and annual median wage for graduates exiting the system and employed.

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<table>
<thead>
<tr>
<th>CIP Code</th>
<th>Program Name</th>
<th>Institution</th>
<th>Award</th>
<th>Total # Declared Majors</th>
<th>Total # Concentrators</th>
<th>Total # Pursuing Additional Education</th>
<th>Total # Graduates Exiting</th>
<th>Total # Graduates Employed</th>
<th>Average Wages: Graduates Exiting &amp; Employed</th>
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<tbody>
<tr>
<td>15.0405</td>
<td>Robotics Technology/Technician</td>
<td>Wichita State University Campus of Applied Sciences and Technology</td>
<td>Assoc/Cert</td>
<td>24</td>
<td>21</td>
<td>15</td>
<td>5</td>
<td>*</td>
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• Was collaboration with similar programs pursued:
Please explain the collaboration attempt or rationale for why collaboration was not a viable option.

As the only technical institution in Kansas to offer a Robotics Technology program, representatives from WSU Campus of Applied Sciences and Technology provided support to Garden City Community College by offering advice on program development. WSU Campus of Applied Sciences and Technology also provided a tour of the labs and equipment they use in their robotics program.

Since the Wichita area has a strong aviation sector, while Southwest Kansas has food production and agriculture, the use of robotics technology is relevant in both sectors. This also provides a complimentary collaboration where each institution has a different industry with similar skill sets within their geographic range.

Program Information

- List by prefix, number, title, and description all courses (including prerequisites) to be required or elective in the proposed program.

**INPR–114 (OSHA 10):**
This 10-hour General Industry Outreach Training Program is intended to provide an entry-level general industry worker’s broad awareness on recognizing and preventing hazards on a general industry site. Students will be introduced to OSHA policies, procedures, and standards as well as general industry safety and health principles and work practices covered in OSHA Act Part 1910. Special emphasis will be placed on areas most hazardous using OSHA standards as a guide. General industry workers must receive additional training, when required by OSHA standards, on specific hazards of the job. Upon successful completion of the course, participants will receive an OSHA 10-hour General Industry Outreach DOL course completion card.

**CSCI-102 (Introduction to Programming)**
This course is recommended for computer science majors. It covers the basic logic required to design and develop good logical computer programs. Course topics include hardware and software configurations as well as the concepts of program logic, top-down design, and structured programs. This course may be taken concurrently with Introduction to Management Information Systems.

**ROBT-110 (Design Thinking in STEM)**
This course provides a framework for applying design thinking in approaching innovation and problem solving in STEM. The course focuses on the process, the tools, and the technology to create solutions to design challenges. Students work in teams to develop ideas, create prototypes, and communicate solutions. Access to digital fabrication technology such as 3D printers and laser cutters, and CAD software support students’ efforts.

**ROBT-100 (Basic Electronics)**
This course covers DC electronics and introductory AC electronics including basic electron theory, magnetism, basic physical laws, resistance, simple electronic instruments, and series and
parallel circuit analysis. Circuits are constructed during laboratory exercises and tested to emphasize concepts. This course also introduces students to basic electrical components and their characteristics, circuit schematics, and basic analysis of series and parallel DC circuits. Hands-on labs help guide student learners to assimilate this material.

**MATH - ### (Math General Education)**
College Algebra or above recommended.

**PCDE 101 or 109 – College Success or Career Success General Education**

**ROBT-120 (Intro to Robotics & Embedded Systems)**
Prerequisite: Basic Electronics. Introduction to microcontrollers, robotics, and automation through hands on training using a small-scale robot and other components. Students will learn about the working principles of motor drivers, motor control, signal transmission, and autonomous control. Students will build, test, program, and troubleshoot their robots using, among other things, the Arduino and Raspberry Pi platforms. Applications of technology across industries will be explored.

**CSCI-140 (Overview of computer Science)**
An overview of computer science is presented in the areas of Networking, Software, Operating Systems, Computer Architecture and Algorithms. The course also examines some of the ethical and legal aspects of Internet security, software engineering and database technology.

**INPR-131 (Shop operations)**
Prerequisite: OSHA 10 (INPR-114). This introductory level course is designed to instruct students in the basic skills necessary to all occupations in the Construction, Manufacturing, and Transportation areas. This lecture/ lab course also introduces the student to the form and function of shop operations for the industrial maintenance craftworker. The emphasis for this course will be on safety, tools, fasteners, and layouts used in the shop by industrial maintenance craftworkers.

**HPER (Personal Wellness General Education)**

**Social Science General Education**

**Communication General Education**

**INPR-160 (Fluid Power 1)**
Prerequisite: OSHA 10 (INPR-114) and Shop Operations (INPR-131). This course provides fundamentals of pneumatics, air compressors, control valves, pneumatic cylinders, electropneumatic controls; and basic pump principles, working of centrifugal pumps, magnetic drive pumps, diaphragm pumps, metering pumps, and pump seals. Students learn how to operate, install, troubleshoot, analyze performance, and design basic pneumatic systems and pump systems.

**INPR-190 (Industrial PLC’s)**
Prerequisite: OSHA 10 (INPR-114) and Shop Operations (INPR-131). This course introduces the use of Programmable Logic Controls (PLCs). Emphasis is placed on, but not limited to, the following: PLC hardware and software, numbering systems, installation, and programming.
Participants may select either processor in programming basic bit-level logic functions, timers, and counters. Sequential programming techniques are also introduced on problems simulating industrial situations. Upon completion, students must demonstrate their ability by developing, loading, debugging, and optimizing PLC programs.

**INPR–231 (Fundamentals of motor control)**
Prerequisite: OSHA 10 (INPR-114) and Shop Operations (INPR-131). This course covers the principles of AC and DC motors, motor control, and general machine operations in a complex mechatronic system. Students will learn the functions and properties of machine control elements and the roles they play within the system. Topics covered will include general machine operations and motor control techniques; mechanical components and electric drives; motor sensors, braking and loads; motor efficiency and power; preventive measures and troubleshooting techniques. Technical documentation such as data sheets, circuit diagrams, schematics, displacement step diagrams and function charts are also covered. By understanding and performing measurements on motors and motor control circuits, students will learn and apply troubleshooting strategies to identify, localize, and correct malfunctions. Safety issues within the system are also discussed.

**ROBT-130 (Automated Systems and Robotics)**
The introductory level class prepares individuals to operate industrial robots and other industry 4.0 technologies in a modern production environment. Students learn to set up industrial robots and end-effectors, create test points, and design simple robot programs for different applications. Ethernet and network communication of robotics will also be discussed. After taking this class students will have the knowledge to pass the SACA Certified Industry 4.0 Associate III - Robot System Operations exam and become certified.

**CSCI-150 (Networking Essentials)**
Learn to install, configure, manage, and troubleshoot basic networks of any size and prepare for an entry-level networking career in the IT industry. Students learn the foundations of network design and management, focusing on the media, topologies, protocols, and standards upon which modern networks are built. This class prepares students to pass the CompTIA Network+ industry exam and provides a foundation for more advanced courses in Microsoft and Linux client/server networking.

**INPR-170 (Fluid Power 2)**
Prerequisite: OSHA 10 (INPR-114) and Shop Operations (INPR-131). This course focuses on understanding hydrodynamics, hydraulic principles, hydraulic circuitry and diagrams, piping, hydraulic valves and actuators, accumulators, hydraulic circuit maintenance, and fluid maintenance. Students learn to operate, install, analyze performance, and design hydraulic and electrohydraulic systems.

**INPR–233 (Variable Speed Motors)**
Prerequisite: OSHA 10 (INPR-114) and Shop Operations (INPR-131). This course introduces variable frequency drives (VFDs) and servo drive technology. Topics includes the purpose of VFDs, general operating principles, analog and digital servo drives, and characteristics of practical servo systems. The lab enables students to program, test, and run drives and motors, as well as how to remove and replace servo drives. Upon completion, students will be able to apply principles of VFDs and servo drives.

**CSCI–262 (Project Management)**
This course introduces project management fundamentals and a framework for managing information technology projects. Project management knowledge areas and process groups are reviewed. The course provides preparation for employment in industry and for project management certification.

**ROBT-200 (Mobile Robots and Vision Systems)**
Prerequisite: Automated systems and robotics, Intro to Robotics and Embedded Systems, and Introduction to Programming (CSCI – 102). This course is a continuation of Robotics and Embedded Systems. It introduces autonomous and semi-autonomous mobile robots and vision systems along with their applications. Students will program, adjust, monitor, and operate industrial autonomous mobile robot (AMR) systems. Students will explore and implement navigation, path planning, and obstacle avoidance systems and algorithms. Concepts related to artificial intelligence for navigation and robot decision making will also be covered. This course will help prepare students for the SACA certification exam in mobile robots as well as vision systems.

**CSCI-107 (Advanced Programming)**
Prerequisite: One of the entry level programming courses or permission of instructor. This course covers disk file structure, creation, and management. Focus is placed on logic methods of data file use. Topics include utility programs, and file types within a specific language. This course may be repeated as computer languages change.

**CSCI-230 (Security+)**
This class introduces students to computer network vulnerabilities and threats and how to safeguard computer networks from those vulnerabilities and threats. This course will expose the student to network security planning, network security technology, network security organization and the legal and ethical issues associated with network security. In this course, students will learn the skills necessary for Security+ certification.

- If the proposed program includes multiple curricula (e.g., pathways, tracks, concentrations, emphases, options, specializations, etc.), identify courses unique to each alternative.

N/A
• Provide a Program of Study/Degree Plan for the proposed program including a semester-by-semester outline that delineates required and elective courses and notes each program exit point.

Minimum Credit Hours Required for AAS Degree = 65

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credit</th>
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<td>INPR-114</td>
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<td>CSCI-102</td>
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<td>Design Thinking in STEM</td>
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<td>PCDE-###</td>
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<tr>
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<td>ROBT-120</td>
<td>Intro to Robotics &amp; Embedded Systems</td>
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<td></td>
<td>CSCI-140</td>
<td>Overview of computer Science</td>
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<tr>
<td></td>
<td>INPR-131</td>
<td>Shop operations</td>
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<td>INPR-190</td>
<td>Industrial PLC’s</td>
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<td>INPR-231</td>
<td>Fundamentals of Motor Control</td>
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<td>ROBT-130</td>
<td>Automated Systems and Robotics</td>
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<td>CSCI-150</td>
<td>Network Essentials</td>
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<td>Variable Speed Motors</td>
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<td>CSCI-262</td>
<td>Project Management</td>
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<td>Mobile Robots and Vision Systems</td>
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<td></td>
<td>CSCI-107</td>
<td>Advanced Programming</td>
<td>3</td>
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<tr>
<td></td>
<td>CSCI-230</td>
<td>Security +</td>
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Minimum Credit Hours Required for Certificate B = 36

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<tr>
<td></td>
<td>CSCI-102</td>
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<td></td>
<td>CSCI-140</td>
<td>Overview of Computer Science</td>
<td>3</td>
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<td>ROBT-120</td>
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<td></td>
<td>CSCI-107</td>
<td>Advanced Programming</td>
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• List any pertinent program accreditation available:
  o Provide a rationale for seeking or not seeking said said accreditation.

  A few options for accreditation exist such as through the Association of Technology, Management, and Applied Engineering (ATMAE) and the Accreditation Board for Engineering and Technology (ABET). However, those organizations are targeted towards more established
programs rather than new ones. While we prepare students for industry credentials through certificate options, we will not pursue accreditation until the program is more established.

- If seeking accreditation, also describe the plan to achieve it.

**Faculty**
- Describe faculty qualifications and/or certifications required to teach in the proposed program. According to the college’s Faculty Qualifications policy, at minimum, for an instructor to teach courses designed to transfer to a four-year university, qualifications include a Master’s degree in Engineering, Math, Physics, or associated program or a Master’s degree with 18 credit hours of graduate study in Engineering, Math, Physics, or associated program. For an instructor to teach a technical course, instructors must generally have a Bachelor’s degree or a combination of other credentials including, but not limited to, an Associate’s degree in the field of robotics, engineering, math, physics or related field, recognized industry certification in those same fields, or a minimum of 4,000 work hours in a related industry.

**Cost and Funding for Proposed Program**
- Provide a detailed budget narrative that describes all costs associated with the proposed program (physical facilities, equipment, faculty, instructional materials, accreditation, etc.).
- Provide detail on **CA-1a form**.

As mentioned previously, this program is a part of the college’s successful Title III Hispanic-Serving Institution STEM grant. Much of the funding for the Robotics and Mechatronics Technology program—estimated at $292,660.18 in the first two years—stems from that grant.

**Faculty**
The college has hired one full-time faculty member, who during the first year of the grant has been working on program development. In year one, this position is 100% covered by the STEM grant. In year two, this position will be covered 80% by the STEM grant. As with all positions in the grant, the college has already budgeted for the assumption of the positions into the operating budget. In year two of the grant, the college’s portion is approximately $12,000.

**Equipment, Tools, and Technology**
The Title III HSI STEM grant also provides significant support for purchasing of equipment to ensure the program is successful. Based on current and projected expenses, there is a total of approximately $58,291.18 of these expenses in year one. A portion of these expenses—an industrial robot—was not written in to the STEM grant and was successfully awarded by the Mary Jo Williams Grant, a grant through the college’s Endowment Association and a local family trust.

In year two, the college anticipates an additional $116,000 in these types of expenses. These are written into the STEM grant as well.

- Provide Excel in CTE fee details on the **CA-1b form**.
- If the program is requesting Perkins funding, provide details on the **CA-1c form**.
- If the program is requesting KS Promise Act eligibility, provide details on the **CA-1d form**.
• Describe any grants or outside funding sources that will be used for the initial startup of the new program and to sustain the proposed program.

Program Review and Assessment
• Describe the institution’s program review cycle.

Garden City Community College’s Comprehensive Program Review is aligned with the Strategic Planning process placing programs on a five-year rotation schedule. Programs review the five previous years of disaggregated outcomes and departmental data for an in-depth evaluation of where the program has been and where it stands at the point of review. A five-year plan for the future is then created based upon the evidence from the evaluation. This future plan feeds into the annual assessment process for the program. Results from program reviews directly impact the budgetary and curricular goals of the programs, departments, and institution ensuring data driven priorities are funneled into the annual planning process and report for future expenditures, hires, reductions, plans, etc. Programs also align changes to curricula and planning as a result of this rigorous comprehensive process.

GCCC’s assessment processes and methodologies were adapted from the Assessment 101 model, which has been used successfully for over a decade at many schools. Although GCCC faculty chose to modify processes and templates to fit institutional culture, they retained the core practices represented in this model: (1) develop quality outcomes; (2) identify multiple measures (direct and indirect) to measure student learning on those outcomes; (3) establish pre-determined targets for overall student performance on the measures; (4) devise appropriate strategies for data collection that are reasonably representative of the student population (and include program majors only for program assessment); (5) ensure that all intended data are collected; (6) analyze and interpret data to identify factors that led to results that were observed; (7) identify and implement action plans aimed at improving student learning and track results across cycles; and (8) integrate assessment results and resource needs from related action plans into budget and planning processes at the program, department, and institutional levels. Additionally, faculty ensure that assessment occurs in a consistent manner across instructional locations and modalities, including distance learning and dual enrollment high school courses.

Program Approval at the Institution Level
• Provide copies of the minutes at which the new program was approved from the following groups:
  o Program Advisory Committee
    (Including a list of the business and industry members)
  o Curriculum Committee
  o Governing Board
    (Including a list of all Board members and indicate those in attendance at the approval meeting)

Submit the completed application and supporting documents to the following:
Director of Workforce Development
Kansas Board of Regents
1000 SW Jackson St., Suite 520
Topeka, Kansas 66612-1368
KBOR Fiscal Summary for Proposed Academic Programs

CA-1a Form (2020)

Institution: Garden City Community College
Proposed Program: Robotics and Mechatronics Technology

**PROGRAM SUSTAINABILITY COSTS (Second and Third Years)**

<table>
<thead>
<tr>
<th>Part I. Program Enrollment</th>
<th>Second and Third Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please state how many students/credit hours are expected during the first two years of the program?</td>
<td></td>
</tr>
<tr>
<td><strong>A. Headcount:</strong></td>
<td><strong>Full-Time</strong></td>
</tr>
<tr>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part II. Ongoing Program Costs</th>
<th>First Two Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please state how many students/credit hours are expected during the first two years of the program?</td>
<td></td>
</tr>
<tr>
<td><strong>A. Faculty</strong></td>
<td><strong>Existing:</strong></td>
</tr>
<tr>
<td></td>
<td>#</td>
</tr>
<tr>
<td><strong>B. Equipment required for program</strong></td>
<td></td>
</tr>
<tr>
<td><strong>C. Tools and/or supplies required for the program</strong></td>
<td></td>
</tr>
<tr>
<td><strong>D. Instructional Supplies and Materials</strong></td>
<td></td>
</tr>
<tr>
<td><strong>E. Facility requirements, including facility modifications and/or classroom renovations</strong></td>
<td></td>
</tr>
<tr>
<td><strong>F. Technology and/or Software</strong></td>
<td></td>
</tr>
<tr>
<td><strong>G. Other (Please identify; add lines as required)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total for Program Sustainability</strong></td>
<td></td>
</tr>
</tbody>
</table>

**IMPLEMENTATION COSTS**

<table>
<thead>
<tr>
<th>Part I. Anticipated Enrollment</th>
<th>Implementation Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please state how many students/credit hours are expected during the initial year of the program?</td>
<td></td>
</tr>
<tr>
<td><strong>A. Headcount:</strong></td>
<td><strong>Full-Time</strong></td>
</tr>
<tr>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part II. Initial Budget</th>
<th>Implementation Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please state how many students/credit hours are expected during the initial year of the program?</td>
<td></td>
</tr>
<tr>
<td><strong>A. Faculty</strong></td>
<td><strong>Existing:</strong></td>
</tr>
<tr>
<td></td>
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<td><strong>B. Equipment required for program</strong></td>
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</tr>
<tr>
<td><strong>F. Technology and/or Software</strong></td>
<td></td>
</tr>
<tr>
<td><strong>G. Other (Please identify; add lines as required)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total for Implementation Year</strong></td>
<td></td>
</tr>
</tbody>
</table>
Please indicate any additional support and/or funding for the proposed program:

Submit the completed application and supporting documents to the following:

Director of Workforce Development
Kansas Board of Regents
1000 SW Jackson St., Suite 520
Topeka, Kansas 66612-1368
Per statute (K.S.A. 72-3810), the Kansas Board of Regents shall establish general guidelines for tuition and fee schedules in career technical education courses and programs. The Excel in CTE tuition and fee schedule of every technical education program shall be subject to annual approval.

Please include all costs charged to **high school students** for the proposed new program.

The college is not planning, at least in the first several years, to charge any course fees to high school students. - Marc Malone, VPIS, Garden City Community College

<table>
<thead>
<tr>
<th>Institution Name:</th>
<th>Garden City Community College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Title:</td>
<td>Robotics and Mechatronics Technology</td>
</tr>
<tr>
<td>Program CIP Code:</td>
<td>15.0405</td>
</tr>
</tbody>
</table>

**Please list all fees associated with this program:**

*Only list costs the institution is charging students.*

<table>
<thead>
<tr>
<th>Fee</th>
<th>Short Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Please list all courses within the program and any fees associated to those courses:**

*Only list costs the institution is charging students. Do not duplicate expenses.*

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Short Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Please list items the student will need to purchase on their own for this program:**

*Institution is not charging students these costs, rather students are expected to have these items for the program.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Short Description</th>
<th>Estimated Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This application should be used for new programs (currently in the program approval process) or existing programs the institution would like reviewed for Carl D. Perkins funding eligibility.

**Program Eligibility**

Any program receiving Perkins funds must be designated as a technical program by KBOR. Definition of a technical program may be found in state statute K.S.A. 72-1802.

**Program Levels:**

<table>
<thead>
<tr>
<th>Educational Award Level</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAPP</td>
<td>1-15</td>
</tr>
<tr>
<td>Certificate A</td>
<td>16-29</td>
</tr>
<tr>
<td>Certificate B</td>
<td>30-44</td>
</tr>
<tr>
<td>Certificate C</td>
<td>45-59</td>
</tr>
<tr>
<td>Associate of Applied Science</td>
<td>60-69</td>
</tr>
</tbody>
</table>

**Stand-Alone Parent Program (SAPP) criteria:**
1. Designated as “Technical Program” in KHEDS
2. Leads to an industry-recognized credential
3. Leads to a specific occupation
4. Addressed and evaluated in the Comprehensive Local Needs Assessment
5. Minimum 6 concentrators (average over the previous two academic years)
6. Instructor/Trainer/Teacher programs and Workforce AID programs are not eligible

**Certificates and Associate of Applied Science (CERT and AAS) criteria:**
1. Designated as “Technical Program” in KHEDS
2. Aligned at the state level (for select aligned programs). Visit the program alignment section of the KBOR website for the list of aligned programs at the state level.
3. Addressed and evaluated in the Comprehensive Local Needs Assessment
4. Minimum 6 concentrators (average over the previous two academic years)
5. Instructor/Trainer/Teacher programs and Workforce AID programs are not eligible
### Carl D. Perkins Funding
### Eligibility Request Form

**Strengthening Career and Technical Education for the 21st Century Act**

**CA-1c Form (2022)**

<table>
<thead>
<tr>
<th>Name of Institution</th>
<th>Garden City Community College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name, title, phone, and email of person submitting the Perkins Eligibility application (contact person for the approval process)</td>
<td>Marc Malone, Vice President for Instructional Services 620-276-9597 <a href="mailto:marc.malone@gcccks.edu">marc.malone@gcccks.edu</a></td>
</tr>
<tr>
<td>Name, title, phone, and email of the Perkins Coordinator</td>
<td>Chuck Pfeifer, Dean of Tech. Ed. and Workforce Development; 620-276-9521 <a href="mailto:chuck.pfeifer@gcccks.edu">chuck.pfeifer@gcccks.edu</a></td>
</tr>
<tr>
<td>Program Name</td>
<td>Robotics and Mechatronics Technology</td>
</tr>
<tr>
<td>Program CIP Code</td>
<td>15.0405</td>
</tr>
<tr>
<td>Educational award levels and credit hours for the proposed request(s)</td>
<td>Certificate B (36 hours) and AAS (65 credit hours)</td>
</tr>
<tr>
<td>Number of concentrators for the educational level</td>
<td>Currently 0</td>
</tr>
<tr>
<td>Does the program meet program alignment?</td>
<td>No current program alignment, but we have worked with both Wichita State University Campus of Applied Sciences and Technology, Wichita State University, and Fort Hays State University on potential similarities and alignment with 2-year and 4-year schools.</td>
</tr>
<tr>
<td>How does the needs assessment address the occupation and the program (provide page number/section number from the CLNA and describe the need for the program)</td>
<td>The most recent Comprehensive Regional Needs Assessment completed in February 2022 indicates that “schools in the region desire to provide students with ‘advanced’ skills to allow them opportunities beyond entry-level work.” (p 11). Local food manufacturers are interested in this program because their existing industrial processes all involve highly mechanized, automated, computer-based, and web-connected processing systems, and this program would provide students with training for these types of jobs. Empirical Foods, for example, is a technology-based company that specializes in ground beef production. Empirical is building a plant in Garden City that will employ over 500 people from the region, and many of those employees will need to be trained in areas such as robotics, mechatronics, electronics, and more.</td>
</tr>
<tr>
<td>Justification for conditional approval: (how will Perkins funds will be used to develop/improve the program)</td>
<td>Perkins funds will be used in future for equipment, travel, and continued professional development training, especially as the program moves out of the college’s Title</td>
</tr>
</tbody>
</table>
Carl D. Perkins Funding
Eligibility Request Form
Strengthening Career and Technical Education for the 21st Century Act
CA-1c Form (2022)

<table>
<thead>
<tr>
<th>Pursuant to Americans with Disabilities Act, the proposed program will be offered in a location or format is fully accessible, according to applicable ADA laws? (Contact Board staff for technical assistance if there are questions regarding accessibility)</th>
<th>Yes, this program will be located in the colleges FOUSE Science and Math building in the STEM Success Center addition, a new-construction building extension. Both the original building and building extension (currently under construction and funded by the STEM grant) are fully accessible according to ADA laws.</th>
</tr>
</thead>
</table>

| Signature of College Official | [Signature] | Date | 12/8/2022 |
| Signature of KBOR Official | [Signature] | Date | [ ] |
Kansas Promise  
Eligibility Request Form  
CA-1d Form (2022)

This application should be used for new programs (currently in the program approval process) or existing programs the institution would like reviewed for Kansas Promise eligibility.

Program Eligibility
Per statutory language (Section 28), a “promise eligible program” means any two-year associate degree program or career and technical education certificate or stand-alone program offered by an eligible postsecondary educational institution that is:

1) approved by the Board of Regents;
2) high wage, high demand or critical need; and
3) identified as a “promise eligible program” by the Board of Regents pursuant to K.S.A. 2021 Supp. 74-32,272:
   - Information Technology and Security
   - Mental and Physical Healthcare
   - Advanced Manufacturing and Building Trades
   - Early Childhood Education and Development

Section 29 (9d), states that the Board of Regents may designate an associate degree transfer program as an eligible program only if such program is included in:

1) An established 2+2 agreement with a Kansas four-year postsecondary education institution; or
2) An articulation agreement with a Kansas four-year postsecondary educational institution and is part of an established degree pathway that allows a student to transfer at least 60 credit hours from the eligible postsecondary educational institution to a four-year postsecondary education institution for the completion of an additional 60 credit hours toward a bachelor’s degree.

Section 30 states an eligible postsecondary educational institution may designate an additional field of study to meet local employment needs if the promise eligible programs within this field are two-year associate degree programs or career and technical education certificate or stand-alone programs approved by the Board of Regents that correspond to jobs that are high wage, high demand, or critical need in the community from one of the following fields:

1) Agriculture;
2) Food and Natural Resources;
3) Education and Training;
4) Law, Public Safety, Corrections, and Security; or
5) Distribution and Logistics

<table>
<thead>
<tr>
<th>Name of Institution</th>
<th>Garden City Community College</th>
</tr>
</thead>
</table>
| Name, title, and email of person responsible for Academic program | Marc Malone, Vice President for Instructional Services  
620-276-9597 marc.malone@gcccks.edu |
| Name, title, and email of Financial Aid contact | Melinda Harrington, Director of Financial Aid  
620-276-9514 melinda.harrington@gcccks.edu |

Last updated: 8/17/2022
## Kansas Promise

### Eligibility Request Form

CA-1d Form (2022)

### Information Technology and Security

<table>
<thead>
<tr>
<th>CIP Code</th>
<th>Program Name</th>
<th>High Wage, High Demand, or Critical Need</th>
<th>Type of Award (AAS, AA, AS, AGS, Certificate)</th>
<th>Scholarship Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</table>

### Mental and Physical Healthcare

<table>
<thead>
<tr>
<th>CIP Code</th>
<th>Program Name</th>
<th>High Wage, High Demand, or Critical Need</th>
<th>Type of Award (AAS, AA, AS, AGS, Certificate)</th>
<th>Scholarship Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

### Advanced Manufacturing and Building Trades

<table>
<thead>
<tr>
<th>CIP Code</th>
<th>Program Name</th>
<th>High Wage, High Demand, or Critical Need</th>
<th>Type of Award (AAS, AA, AS, AGS, Certificate)</th>
<th>Scholarship Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.0405</td>
<td>Robotics and Mechatronics Technology</td>
<td>High Wage</td>
<td>Certificate B and AAS</td>
<td>Fall 2023</td>
</tr>
</tbody>
</table>

### Early Childhood Education and Development

<table>
<thead>
<tr>
<th>CIP Code</th>
<th>Program Name</th>
<th>High Wage, High Demand, or Critical Need</th>
<th>Type of Award (AAS, AA, AS, AGS, Certificate)</th>
<th>Scholarship Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

### College Designated Field of Study:

<table>
<thead>
<tr>
<th>CIP Code</th>
<th>Program Name</th>
<th>High Wage, High Demand, or Critical Need</th>
<th>Type of Award (AAS, AA, AS, AGS, Certificate)</th>
<th>Scholarship Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

**If any programs are claiming “critical need” status, please provide supporting documentation:**

Signature of College Official ___________________________ Date 12/8/2022

Signature of KBOR Official ______________________________ Date __________

**Special Note to Kansas Independent Colleges:**

Please carbon copy the KICA contact below when submitting this application to the Kansas Board of Regent office:

Matt Lindsey, President KICA
matt@kscolleges.org

Last updated: 8/17/2022
October 24th, 2022

Dear President Ruda,

I write this letter in support of Garden City Community College’s (GCCC) Robotics Technology certificate and A.A.S. application. Dairy Farmers of America has been a supporter of GCCC for over 5 years and we have partnered with them on a variety of trainings and educational opportunities on multiple occasions.

Dairy Farmers of America’s facility in Garden City utilizes some of the latest and advanced automation technologies to create a safer product for our consumers while also creating more value for our Farmer Owners. As an organization we have found that there is lack of knowledge and training within the local workforce related to Industrial Automation, Electricity and Robotics. We believe that the above programs will help bridge that gap.

Dairy Farmers of America can offer support to the program in the form of participation within the Robotics and Mechatronics Advisory Committee. Dairy Farmers of America is also interested in attending recruiting events and other activities on campus that can highlight the opportunities for employment in the field of robotics and automation.

In summary, Dairy Farmers of America is excited about the potential for a new Robotics Technology program at GCCC and we support your application.

Sincerely,

Alex Booker  
Dairy Farmers of America  
Senior Controls Specialist  
cebooker@DFAMilk.com
Dear President Ruda,

I write this letter in support of Garden City Community College’s (GCC) Robotics Technology certificate and A.A.S. application. empirical has been a supporter of GCCC for years and we have partnered with them on a variety of projects on multiple occasions.

empirical is a company that believes everyone deserves safe, quality, and affordable food. We meet this demand by thinking bigger and smarter. As leaders in developing equipment, processes, and methods to get things done, we rely on our technical folks to have and maintain a high standard of knowledge and application. We are changing the future of food and recruiting the best talent to help. That means we invest and re-invest in everything we do, including investing and supporting programs that will help meet the needs of our technical departments and thus the company. A program like GCCC’s Robotics Technology can assist in getting students workforce ready with opportunities lined up post-graduation.

empirical can offer support to the program in the form of participation in the advisory committee, faculty professional development, opportunities for employment for program participants and graduates, guest speaking in the classroom, and more. empirical is also interested in attending recruiting events and other activities on campus that can highlight the opportunities for employment in the field of robotics and automation.

In summary, empirical is excited about the potential for a new Robotics Technology program at GCCC and we support your application.

Darren Ware
Director, Human Resources

o: (605) 217-8154  c: (712) 301-3332  www.empiricalfoods.com
October 20, 2022

Dear President Ruda,

I am writing this letter in support of Garden City Community College’s Robotics and Automation Technology certificate and A.A.S. degree program(s). Sunflower Electric Power Corporation has partnered with GCCC for many years to provide its employees with technical training opportunities.

As the power generation and transmission industry grows and adapts to newer technologies, it is a constant challenge to find trained and experienced individuals to add to our workforce. This puts our partnership with GCCC at a premium, to be able to find and train those who are interested in entering a technical trade. It also provides an avenue to enhance the knowledge of our existing staff with industry specific apparatus (e.g. sensors, transmitters, PLC’s, etc.).

Sunflower Electric has supported the robotics program with advisory committee members and looks forward to future opportunities to help champion these types of training initiatives.

In summary, Sunflower Electric is excited about the potential for a new Robotics and Automation Technology program at GCCC and we support your application to the Kansas Board of Regents to help make this a reality.

Sincerely,

Karry Cahill Jr
Control Systems Coordinator

Scot Donecker
Enterprise Architect
November 10, 2022

Jennifer Hands  
Career & Technical Education Coordinator  
USD #457, Garden City Public Schools  
1205 Fleming St.  
Garden City, KS. 67846

To Whom it May Concern:

The skills students develop through robotics education programs are valuable and transferrable to a variety of careers. With the new development of a Robotics program at Garden City Community College, I believe Garden City High School students would greatly benefit from dual-credit courses in this field of study. If Garden City Community College were able to provide these dual-credit courses, Garden City High School would strive to make the courses accessible to our students.

Sincerely,

[Signature]

Jennifer Hands  
Career & Technical Education Coordinator
Mission
Garden City Community College exists to produce positive contributors to the economic and social well-being of society.

Vision
GCCC will be the premier educational nexus to progress, providing world class learning in a dynamic environment. From Here, you can go anywhere.

Values
Bold innovation
Unwavering Integrity
Service and Collegiality
Trust, Transparency, & Accountability
Empowered Creativity & Academic Freedom
Responsible Leadership
Student-centered focus

Board Members:

Attendees:

I. Meeting Called by: Dean, Chuck Pfeifer
   Time: 11:52
   A. Introductions were made around the room
   B. Welcome from Dr. Marc Malone, Vice President for Instructional Services
      a. Thank you for investing in our program
         i. Programs are not sustainable without the input from the industry

II. Review Minutes from previous meeting
    A. No prior meeting minutes

III. Campus Update - Malone
    a. Construction
       i. Transportation Building
          1. Nearly complete
       ii. Current Projects
          1. STEM Success Center
             a. Chem Lab
             b. Robotics Classroom
             c. Cybersecurity
             d. Group study space
          2. Expansion of John Deere Building
             b. Credit hours are up over 2% - carrying an upward trend with enrollment
             c. Greenhouse is coming with Crop Production
             d. Accreditation Visit happening on Nov 7&8th

IV. Perkins Grant Update
    a. Chuck Pfeifer, Dean of Technical Education
i. Purpose and Structure breakdown
ii. State Funding – one allocation for all of Tech ED
   1. Divided among all 15 programs
      a. Professional Development Funding
      b. Equipment Funding

V. Title III Federal Grant – Pfeifer
a. New Programs
   i. Cybersecurity
   ii. Robotics
   iii. Crop Production
b. STEM Center Renovation
   i. Robotics Classroom
   ii. Robotics Competition Arena

VI. Student Involvement
 a. Plans to build a Robotics Team
 b. Competitive or engagement direction options

VII. New Business
 a. WSU visit
    i. Articulation
       1. Roughly 42 credit hours to transfer
 b. Program overview presentation
    i. Visual presentation and handouts provided
    ii. BOARD VOTE to approve presented curriculum
       1. Cert B
       2. AAS
       3. AS
          a. Motion – Chuck Pfeifer
          b. 2\textsuperscript{nd} – Morgan Meyer
          c. All in favor – motion carries
 c. Vote for a President
    i. Volunteers accepted
       1. Pres – Alex Booker, DFA
       2. Vice – Karry Cahill, Sunflower

VIII. Open Discussion
 a. Required industry credentials – recommendations from the Board
    i. PF70E
    ii. ARC Flash
    iii. Networking is extremely important
    iv. Servers, circuits, and computer parts
    v. VMWare Course – industry standard
 b. Physics component to pressure and sensors
    i. Theory course of engineering physics or possibly general physics
 c. Some Chemistry courses may be helpful to know the weight of certain gases

IX. Adjournment
    Time 12:33 pm – Karry Cahill

A. Set date for next meeting – Spring of 2023
Curriculum and Instruction Committee
Meeting Agenda
October 18, 2022

Attendance

Voting Members:
A quorum requires ½ of voting members +1 voting member.

<table>
<thead>
<tr>
<th>Present</th>
<th>Absent</th>
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<tbody>
<tr>
<td>Helen Weeks</td>
<td>Devin Wackerla</td>
</tr>
<tr>
<td>Nicole Dick</td>
<td>Bret Haire</td>
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<tr>
<td>Amy Waters</td>
<td></td>
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<tr>
<td>Nancy Unruh</td>
<td></td>
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Guests:
Jodie Tewell
Samantha Sanger (virtual)
Marc Malone - Chair
Yuriy Drubinskiy
Ben Gershon
Ron Carlson
Patsy Zeller
Tracy Lamb

Approval of Minutes - Motion to approve by Nicole, Second by Amy. Approved unanimously.

I. Old Business: Discussion Topics
   a. New Program: Robotics – Yuriy Drubinskiy
      i. Program is a blend of industry and college needs.
      ii. Includes adding new classes and updating current classes.
      iii. Students will have experience with coding, robotics, and design.
      iv. 36-hour Cert B options and 65-hour AAS option. Future plans to develop transfer AS option as well.
      v. Sam will work with Yuriy to set up curriculum map based on presented PLOs.
      vi. For new courses
          1. SLOs should be reworked to use a word other than understand.
          2. ROBT possible prefix for new courses. Numbers will be decided soon. Nancy will work with Yuriy to get these established.
          3. Syllabi include old Essential Skills wording not new General Education wording. Sam will work with Yuriy to get those fixed.
      vii. Program to start Fall 2023. Aligns with Title III grant.
      viii. Amy moves to approve program and courses with updates noted. Second by Helen. Motion passed unanimously.
          1. Next step, GCCC Board of Trustees in November. Then to KBOR after internal approval.
   i. GCCC already has a Cert A in Computer Support Specialist (CSS). This program is an extension of what we already provide.
   ii. This is a KBOR aligned program
   iii. One course being reactivated to complete the program plan.
   iv. Program to start Fall 2023. Aligns with Title III grant.
   v. Nicole moves to approve program and courses with updates noted. Second by Amy. Motion passed unanimously.
      1. Future may add a Cert C.
      2. Next step, GCCC Board of Trustees in November. Then to KBOR after internal approval.

c. Course Reactivation—CSCI-152 Computer Networks – Ron Carlson
   i. Syllabi submitted has wrong title, Ron is already aware and will fix. Title should be Computer Networks (not Networking Essentials).
   ii. New SLOs presented in syllabi from last used.
   iii. See section I.b.v. above for motion and approval (with program).

d. Nursing Curriculum Changes – Amy Waters
   i. Working with an education expert to revise program and location points where students are having a difficult time with the program.
   ii. Recall, health, and wellness requirements for nursing students is waived. This frees up hours for students to take more Nursing-specific courses.
   iii. Interpersonal Communications prerequisite removal presented for some of courses.
   iv. These changes will lead to PLO changes.
      1. Lowering the number of PLOs from 14 to 6.
      2. Paper copy provided during meeting.
   v. NURS 212 Leadership (title change)
      1. Presented syllabus has incorrect name in header. Should be Advanced Leadership.
   vi. NURS 201 Maternal Child II (title change)
      1. Has been a low scoring area, giving more focus to this topic.
      2. Moving from one (1) to two (2) hours.
   vii. NURS ____ Transition to Professional Practice (new course)
      1. To help prepare students for testing.
   viii. NURS 203 Mental Health II (title change)
ix. Plan is to start Fall 2023.
   1. Curriculum maps and catalog will change then.
   2. More than 25% of the program will be changed, therefore will need to report to KBOR.

x. After C&I approval, would move on to KSBN in December. Course numbers needed before submission to KSBN. Discussion on maybe changing course numbers.

xi. Nursing syllabi all appear to be missing the General Education Outcomes section.

xii. Motion to approve title changes, credit hour change, new course (NURS 212, 201, _____, 203), presentation of remaining course changes seen in bullet below by Nicole. Second by Nancy. Item approved unanimously.

xiii. Return to C&I for future notification of remaining changes: Prerequisite changes for program (IPC), PLOs, and course semester sequence.
   1. C&I may need to update forms to allow for more flexibility on changes for programs.

e. New Course Request: College Algebra Companion – Ben Gershon
   i. The goal of the companion class is to help students with additional review and practice of needed concepts for success in College Algebra.
   ii. Corequisite reform. Hopefully remove the need for as many remedial classes in the future.
   iii. Request for 1 credit hour class for students with 2 hours load for instructors.
      1. Code class as a lab class to comply with credit hour compliance.
   iv. Motion by Nancy to approve adding a new class with lab amendment above. Second by Helen. Approved unanimously.

f. MATH 108-College Algebra prerequisite change – Nicole Dick
   i. May not be able to change prerequisites at section level. Might override requirements for Spring 23 pilot.
   ii. Motion by Nancy to table item for further research. Second by Helen. Approved unanimously with vote above (1.g.iv).

II. Tabled Business – until next C&I Meeting – November 2022

a. Tabled to next meeting. Syllabus Master Template Updates (Vote Required)
   i. Delivery Modes Section
   ii. Academic Dishonesty and Appeal
   iii.
b. Tabled to next meeting. PHSC 110: Introduction to Meteorology: Approved for reactivation in May 2022, not in catalog. Add to and to general education distribution list in AS, AGS, AAS degree
   i. Does this course transfer as a general education course to at least two Regent institutions in Kansas?


d. Tabled to next meeting. Policy Review: Course Cancellation Policy-Veronica Goosey

Motion to adjourn. 1:14pm.
Trustees Present: Leonard Hitz, Dr. Merilyn Douglass, Beth Tedrow, David Rupp, Bob Larson, Shanda Smith

Others Present: Dr. Ryan Ruda, President
Karla Armstrong, Vice President
Madilyn Limberg, Assistant Director of Marketing and PR
Meghan Flynn, Reporter Garden City Telegram
Jodie Tewell, Executive Assistant to the President
Matt Stockemer, Web and Systems Administrator
David Larson, Software Specialist
Veronica Goosey, Associate Professor of English, Faculty Senate President
Mason Osborne, Campus Police
Allison Sandoval, SGA Representative
Brittany Clark, Student Activities Director
Antonio Turner, Campus Safety Officer
Jaime McVey, Health, Physical Education and Recreation Instructor
Seferino Ramirez, SGA President

CALL TO ORDER:
Chair Douglass called the board meeting to order at 6:02 pm.

COMMENTS FROM THE CHAIR:
Chair Douglass appreciated Dr. Ruda for his leadership during the HLC visit. The pillars that GCCC has created were the basis for our success. Chair Douglass, Trustee Hitz, and Trustee Larsen attended the ACCT conference in New York City and will give a report next month. Chair Douglass thanked all who attended the Board Appreciation Dinner on November 3, 2022. The campus will be closed next week for a break.
B. **Report for SGA**  
Club organizations will have a tree decorating contest for the Community Christmas Party and students will have their Tree Lightening on December 1.

C. **New Employees**  
Antonio Lamar Turner, Campus Safety Officer  
Jaime McVey, Health, Physical Education and Recreation Instructor  
Jamie Major, Allied Health Faculty

II. **CONSENT AGENDA**

Chair Douglass and Trustee Smith requested to pull Items A, C-1, D, and E.

Move to approve to accept the consent agenda Items B, C - 2, C-3, C-4, C-5.

**Motion:** Beth Tedrow  
**Second:** Bob Larson

**Ayes:** Hitz, Smith, Tedrow, Douglass, Rupp, Larson  
**Nays:** None

**Motion Carried:** 6-0

(A) **Approval of minutes of previous meetings**  
Thursday, November 3 - Shanda was not in attendance.

   **Move to approve with the correction on page 12, removing Shanda Smith’s name from attendees.**

   **Motion:** Merilyn Douglass  
   **Second:** Beth Tedrow

   **Ayes:** Hitz, Smith, Tedrow, Douglass, Rupp, Larson  
   **Nays:** None

   **Motion Carried:** 6-0
November 15, 2022

(B) Approval of personnel actions-Human Resources
(Supporting documents filed with official minutes)

(C) Approval of Financial information
C-1 Karla Armstrong, CFO, provided a corrected sheet of the Published Funds Operation Revenues and Expenses. The correction was made in the YTD Rev/Exp with encumbrances column. The corrected information is below.

Garden City Community College
10/31/22 - 33.3% of the year

Published Funds Operating Revenues and Expenses

<table>
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<tr>
<th></th>
<th>Budget FY23</th>
<th>FY22</th>
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<tr>
<td></td>
<td>Adopted Working Budget</td>
<td>YTD Rev/Exp with encumbrances</td>
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<tr>
<td>Revenues</td>
<td></td>
<td></td>
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<td>Fund 11 - General Fund</td>
<td>$ 20,062,008</td>
<td>$ 3,970,874</td>
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<td>Fund 12 - PTE</td>
<td>$ 5,129,412</td>
<td>$ 1,165,226</td>
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<td>Fund 16 - Auxiliary</td>
<td>$ 3,527,811</td>
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<td>Fund 61 - Capital Outlay</td>
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<td>$ 33,436,597</td>
<td>$ 6,912,790</td>
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<tr>
<td>Expenses</td>
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<td>$ 20,062,008</td>
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<td>$ 38,459,367</td>
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*Note: We have not closed the year - so the totals include past year encumbered expenses.

Move to approve C-1 as presented.

Motion: Merilyn Douglass
Second: Leonard Hitz

Meeting of Trustees
November 15, 2022
Ayes: Hitz, Smith, Tedrow, Douglass, Rupp, Larson
Nays: None

Motion carried: 6-0

(D) Computer Support Specialist Program Approval
Dr. Ruda presented information for Computer Support Specialist Certificate B and AAS. This is a redraft of a program we brought forward to the Board, specifically in Cyber Security. Through the process of approval, TEA suggested we redraft our application as Computer Support Specialist.

Trustee Tedrow discussed pages 40, 41, and 43 that refer to the AAS as 64 credits. On pages 40 and 41, the AAS is 60 credit hours. The AAS is 64 credits, and AS is 60. Chuck Pfeifer will go through the program and correct the discrepancies.

Move to accept consent agenda Item D – Computer Support Specialist with corrections as discussed.

Motion: David Rupp
Second: Bob Larson

Ayes: Hitz, Smith, Tedrow, Douglass, Rupp, Larson
Nays: None

Motion Carried: 6-0

E. Robotics Program Approval
Dean Chuck Pfeifer presented information on the Robotics program. Robotics Program: This program was identified within the Title III Grant. There is a vast array of opportunities in Robotics. Trustee Tedrow discussed that pages 57 and 58 refer to 65 credit hours and Associate "of" not 'in." Page 66 minimum credit hours has 65 credit hours. This program is 65 credit hours. Trustee Tedrow requested Associate "IN."
Move to approve Item II-E as stated.

Motion: David Rupp
Second: Bob Larson

Amended motion to approve Item II – E with corrections.

Motion: David Rupp
Second: Bob Larson

Ayes: Hitz, Smith, Tedrow, Douglass, Rupp, Larson
Nays: None

Motion Carried: 6 -0

III. CONFIRMATION OF MONITORING REPORTS:
   A. Monitoring Reports and ENDS
      No Reports this month.

   B. Review Monitoring Reports
      B-1 Workforce Preparedness
      Students will be prepared for success in the workplace. Chair
      Douglass looked for additional definitions during the ACCT
      conference. The first one is what is called financial literacy. A student
      in the workforce should know how to pay bills, use credit cards, and
      understand loans and repayments. The Trustees had a robust
      discussion regarding how to set indicators for student success in this
      area.

      The trustees agreed to update #2 in the policy to state:
      "Students will have discipline and collaborative skills necessary to be
      successful in the workplace and have exposure to relevant work ethics
      and financial literacy. "

Consensus to change work preparedness as stated above.

IV. OTHER

A. Open comments from the public
   No public comments

B. President’s Report
   Dr. Ruda presented information regarding HLC Accreditation, Broncbuster Outdoor Fitness Center, and Exploration Day Success; we had three Broncbusters named to the All – Jayhawk Team – Kate Perryman, Fiona Arnold, Jelena Milovanovic, Head Coach Patric Hitz reached his 10th career win and his 50th win at GCCC this season and Endowment Association Scholarship Celebration. Congratulations to the women's half-marathon team, which finished fourth at the NJCAA National Championships in Tallahassee, Florida.

   Trustee Rupp suggested adding more lighting around the Fitness Center to help protect our resources. Dr. Ruda said that in the master planning, once we get the greenhouse, we will do more landscaping and lighting in that area.

E. Incidental Information
   Trustees accepted printed reports.

F. Report from FCEDC
   There are 10 Housing Projects in process in the area at this point. Some of them are under construction, and the rest are in the planning and permitting process.
CHILD CARE -
3rd Street facility is in the License phase with KDHE.
Dreams Childcare on 8th St. (former Community Daycare) was hoping to be open soon.
Community Day Care (across the street from Dorms) had to close temporarily because of a lack of staff. It is open now.

G. Report from KACCT
The next meeting is December 2-3 in Coffeyville.

H. Report from Faculty Senate
Veronica Goosey reported that faculty are pleased and relieved with how well the HLC visit and Exploration Day went. Faculty are still reviewing instructional policies. Veronica gave the trustees information regarding DE&I sessions during the NISOD conference.

V. Ownership Linkage
Trustee Rupp attended the Allied Health Meeting on October 27 for Merilyn (while she was in New York). It was their first meeting, and it went well. A discussion was about Alzheimer's disease, and the research was done with the KU Alzheimer’s Disease Research Center. SW KS is part of this research, with Glenda Owens participating. There were 3 of their representatives attended, and they discussed the partnership and help that Glenda Owens has provided so far. Classes involving some of the paths will start in the spring.

Trustee Tedrow attended the Early Childhood meeting. Two representatives come from Liberal and contribute generously to the information presented.

Trustee Hitz attended coffee with the President. There was a good turnout. He encouraged the President to have it more often. It would be a good idea to have coffee with the Board. There were questions and requests on some personal enrichment classes, like how to use your iPhone and iPad. We have Chris Turpin coordinating this.
There were questions about why the buses were sitting out and not in the new transportation building.

Trustee Tedrow commented that she has seen people using the new outdoor exercise equipment.

Trustee Hitz noticed that students were taking reserved seats during games. Ashely, Emmett, Mike, Colin, and Dr. Ruda have all asked students to move when the seats are needed.

The December Board meeting has been moved to the 13th to accommodate the break.

Special Board meeting placeholder on December 16 – the John Deere building. We will verify that date once we get the final information.

Chair Douglass discussed the results of last month’s Board evaluation. The Board filled out this month’s evaluation. We are at a point where we can entertain changing the questions. Chair Douglass will bring new ones to the next meeting.

VI. Executive Session
   No session

VII. Adjournment
   The meeting adjourned at 7:41 pm.