COVER SHEET FOR ALL CURRICULUM PROPOSALS

| Check all Campuses making this proposal. |  | ALL Proposals | New Programs/Courses |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | PC Signature | CEO Signature <br> (CEO signature needed for all new programs and any new courses that have new facility/resource costs associated with the course) | New Program Approval Supplement B ("Budget" included for each campus) | New Program Approval Section 6 ("Cost Effectiveness and Resources" included for each campus) |
|  | ACC |  |  |  |  |
|  | CCC |  |  |  |  |
|  | GWCC |  |  |  |  |
|  | HCC |  |  |  |  |
| X | $\chi^{\text {MCC }}$ | Mehrdad Faezi |  |  |  |
|  | MxCC |  |  |  |  |
|  | NVCC |  |  |  |  |
|  | NWCC |  |  |  |  |
|  | NCC |  |  |  |  |
|  | QVCC |  |  |  |  |
|  | TRCC |  |  |  |  |
|  | TxCC |  |  |  |  |

Type of Proposal.

|  | LEGACY Program (degree or certificate) to be aligned under CT State |
| :--- | :--- |
|  | LEGACY Course to be aligned under CT State |
|  |  |
|  | NEW Program (degree or certificate) |
|  | NEW Course |
|  |  |
| X | MODIFICATION of an Existing Aligned Program (degree or certificate) |
|  | MODIFICATION of an Existing Aligned Course |
|  |  |
|  | DISCONTINUATION of a Program (degree or certificate) |
|  | DISCONTINUATION of a Course |
|  |  |
|  | OTHER (please describe): |


| Directions: Please provide the date, name of originator, title, and campus below. |  |
| :--- | :--- |
| Date: | Primary Campus of Originator: |
| $12 / 21 / 2023$ | Manchester |
| Name of Originator: | Title of Originator: |
| Mehrdad Faezi | Professor, Engineering \& Technology |

Program Name (Aligned):
Program Name (Modified):
TS: Industrial Technology, AS (INTC-AS-COT)
No Change

Degree Type (Aligned):
Degree Type (Modified):

| AS | No Change |
| :--- | :--- |

## Summary of Modifications:

The degree's highest MATH requirement is MATH 1610 (Pre-Calculus).
Remove EGR 2250 - Computational Methods for Engineering (4 credits) from the list of required courses. EGR 2250 has a prerequisite of MATH 2600-Calculus I.

The program will change from 66-70 to 62-66 credits.

Program Description (Aligned):
Program Description (Modified):
As part of the Connecticut College of Technology (COT), the Technology Studies A.S. degree provides the knowledge and skills within specific high-demand technology fields. The program consists of lecture and lab course work in engineering, technology, industrial technology, mathematics, sciences, and foundational requirements that provide a solid comprehensive background for continuation in a four-year technology degree program or entry into the workforce. Upon completion of a Technology Studies A.S. degree, students can transfer to Central CT State University or the University of Hartford to complete designated B.S. degrees.

| Program Learning Outcomes (Aligned): | Program Learning Outcomes (Modified): |
| :---: | :---: |
| Upon successful completion of all program requirements, graduates will be able to: <br> - Apply mathematical, scientific and technological principles and concepts to identify and <br> formulate solutions to technical problems. <br> - Demonstrate the ability to function on teams. <br> - Recognize the need to engage in life-long learning. The Technology Studies: Industrial Technology associate degree program prepares students <br> primarily to transfer to complete a B.S. degree in automotive, construction management, <br> environmental safety, electrical engineering, manufacturing and energy. Graduates will receive a background in mathematics, science, and general education courses for transfer into a four-year program. <br> Careers in this field include jobs in industrial design, occupational health and safety, sustainable energy generation/transmission, lean manufacturing analysis, and laser technicians. A grade average of "B" with no grade less than 'C', and completion of the full program is required for continuation as a junior in CCSU's School of Technology or at Charter Oak. <br> In addition to meeting the Technical Studies outcomes students successfully completing this option will: <br> - Transition seamlessly into a Bachelor of Science Degree Program in Industrial Technology with junior level status in the receiving institution as part of the Technology Studies Pathway Program. - Assist in <br>  - Apply appropriate mathematical and scientific principles to engineering and technology applications. <br> Identify and apply engineering principles/ concepts. <br> Analyze and resolve technology problems. <br> Apply knowledge and skills to develop, interpret, and select appropriate technological <br> Demonstrate the ability to think through a problem in a logical manner. <br> Organize and carry through to conclusion the solution to a problem. <br> Work in teams. | Upon successful completion of all program requirements, graduates will be able to: <br> No Change |


| Below are the general education requirements for the CT State General Education core (approved by the BOR 5/14/2020). |  |  |
| :---: | :---: | :---: |
| 1 | ENG 1010 Composition | 3 credits |
| 2 | MATH 1000 or higher - college-level mathematics, recommended pathway varies by program | 3-4 credits |
| 3 | Arts \& Humanities Gen Ed Courses ARHX Recommend course varies by program | 3 credits |
| 4 | Choose one from: <br> Scientific Reasoning Gen Ed Courses SCRX <br> Scientific Knowledge Gen Ed Courses SCKX <br> Recommended course varies by progam | 3-4 credits (lab optional in some programs) |
| 5 | Choose one from: <br> Social/Behavioral Science Gen Ed Courses SBSX <br> Historical Knowledge Gen Ed Courses HISX <br> Recommended course varies by program | 3 credits |
| 6 | Choose one from: <br> Oral Communication Gen Ed Courses ORAX Written Communication II Gen Ed Courses WRIX Recommended course varies by program | 3 credits |
| 7 | Choose one from: <br> Continued Learning/Information Literacy Gen Ed Courses CLIX <br> Scientific Knowledge Gen Ed Courses SCKX <br> Scientific Reasoning Gen Ed Courses SCRX <br> Social/Behavioral Science Gen Ed Courses SBSX <br> Historical Knowledge Gen Ed Courses HISX <br> Written Communication II Gen Ed Courses WRIX <br> Oral Communication Gen Ed Courses ORAX <br> This is a program-designated course fulfilled in most cases by CCS 1001 - College \& Career Success | 3-4 credits |
|  | Students must take at least one course in the Gen Ed core which meets a diversity requirement. |  |
|  | General Education Total: | Total: <br> 21-25 credits |

CT State Community College - Modification of an Aligned Program (Below Threshold)

| General Education Core Courses (21-25 credits) (Aligned) |  |  |  | General Education Core Courses (21-25 credits) (Modified) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Course <br> Number | Course Name | \# of Credits |  | Course <br> Number | Course Name | \# of Credits |
| 1. | ENG 1010 | English Composition | 3 | 1. | ENG 1010 | English Composition | 3 |
| 2. | MATH 1610 | Pre-Calculus | 4 | 2. |  | No Change |  |
| 3. | Art Elective |  | 3 | 3. |  | No Change |  |
| 4. |  | Concepts of or General Chemistry | 4 | 4. |  | No Change |  |
| 5. | Eative HISXOR SsXXX ECON | Historical Knowledge or ECON | 3 | 5. |  | No Change |  |
| 6. | ENG 1080 or Conm 1301 | Composition I: Technical Writing OR Public Speaking | 3 | 6. |  | No Change |  |
| 7. | CCS1001 | College \& Career Success | 3 | 7. |  | No Change |  |
| General Education Core Credits |  |  | 23 | General Education Core Credits |  |  |  |


| Program Requirements (36-39 credits) (Aligned) |  |  |  |  | Program Requirements (36-39 credits) (Modified) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Course <br> Number | Course Name | \# of Credits | Prereq/ Co-req Course \# |  | Course Number | Course Name | \# of Credits | Prereq/ Co-req Course \# |
| 1. |  | Gen. Physis Ior Calc-based Phys 1 | 4 | matri 6000 r 2000 | 1. |  | No Change |  |  |
| 2. | BHEL Elective | Behaviora Sterene or anth, PSY orsoc | 3 |  | 2. |  | No Change |  |  |
| 3. | MATH 1200 | Statisisis Ior Staisisiss IwComputer App | 3-4 | oseagas, 10.0 aroter | 3. |  | No Change |  |  |
| 4. | CAD Elective |  | 3 |  | 4. |  | No Change |  |  |
| 5. | EGR 2250 |  | 4 | Esh 1110 ard matry | 5. |  | REMOVE |  |  |
| 6. | EGR 1110 | Intro to Engineering | 3 | matrioloor igher | 6. |  | No Change |  |  |
| 7. | Env 1800 ofanymeg | Sustanable Energy and the Evvionment | 3-4 |  | 7. |  | No Change |  |  |
| 8. |  |  |  |  | 8. |  | No Change |  |  |
| 9. |  |  | 18 |  | 9. |  | No Change |  |  |
| 10. |  | Choose 1 from below |  |  | 10. |  | No Change |  |  |
| 11. | CSC 1201 | Introduction to Programming | 4 |  | 11. |  | No Change |  |  |


| CT State Community College - Modification of an Aligned Program (Below Threshold) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12. | CSC 1203 | Python Fundam $\epsilon$ | 3 | 12. | No Change |  |  |
| 13. | CSC 2214 | C++ Programmir | 3 | 13. | No Change |  |  |
| 14. | CSC 1211 | Java I | 3 | 14. | No Change | 3 |  |
| 15. | CSC 2212 | Java II | 3 | 15. | No Change |  |  |
| 16. | EGR 1115 | Programming for | 3 | 16. | No Change |  |  |
| 17. | EGR 2201 | MATLAB for Eng | 3 | 17. | No Change |  |  |
| 18. | EGR 2230 | C++ for Engineel | 3 | 18. | No Change |  |  |
| 19. |  |  |  | 19. |  |  |  |


| Program Requirement Credits | $44-47$ | Program Requirement Credits | $39-43$ |
| :--- | :--- | :--- | :--- |
| General Education Core Credits | 23 | General Education Core Credits | 23 |
| Program Total Credits (60-61) | $67-70$ | Program Total Credits (60-61) | $64-67$ |

Resource needs have been discussed with Library Services and Information Technology Operations. (Complete if applicable.)

| Name and Title | Signature of Originator | Date |
| :---: | :---: | :--- |
| Mehrdad Faezi, Professor | Mehrdad Faezi | $12 / 21 / 2023$ |

$\square$ No Library Services needed
$\square$ No Technology Services needed

| GOVERNANCE BODY | SIGNATURES | DATE |
| :--- | :---: | :---: |
| Statewide Discipline Council | Pat - | 2024-04-06 |
| School Area Curriculum Council |  |  |
| Curriculum Congress |  |  |
| School Area Academic Dean |  |  |
| CT State Provost |  |  |
| *Campus CEO (if applicable) |  |  |
| *CT State President (if applicable) |  |  |

