CALL TO ORDER

AGENDA MODIFICATIONS (Information)
This item allows for items to be removed from the Agenda or for items to be considered in a different order than they are presented in the published document. It is also an opportunity for both the Chair and the members to indicate an interest in pulling Items off the Consent Agenda to be considered separately. Items on the Consent Agenda are considered routine matters of business.

APPROVAL OF MINUTES (Consent/Information)
April 6, 2020 minutes

CHAIR’S REPORT (Action/Information)
- Introduction: Tony DiSalvo, Vice President, Academic Affairs; administrative co-chair
- Confirmation: Curriculum Committee meeting by vote on Additional Approvals - May 18, 2020
- Jesse MacEwan: Faculty Senate - Pass/No Pass Implementation
- 2020-2021 Curriculum Committee Meeting Calendar
- Year-End Report

ARTICULATION UPDATES
None

SELECTED TOPICS (Consent/Action)
None

MINOR REVISIONS (Consent/Information)
CNET-142 Introduction to Programming with Python – Ron Sha
Add cross-reference with CS-142. CNET will be the primary department. Revise course content; methods of evaluation; methods of instruction.

ENGI-101 Introduction to Engineering – Rose-Margaret Itua
Change class schedule description: Students explore engineering as a career option. This course includes hands-on projects and team work. Revise methods of evaluation; methods of instruction; textbooks.

MM-110/ ART-140 Video Production for Streaming and VR – Isabel Reichert
Change title from Digital Video for the Web and DVD. Change catalog description: This course is a hands-on introduction to digital video to develop media production skills. The course combines equipment demonstrations, technical workshops, lectures on film theory, readings, discussion, and critiques to give students a fully rounded introduction to all aspects of digital video pre-production, production, and post-production. Topics include producing narrative and documentary-style videos; camera proxemics; composition; editing; video file formats and compression; special effects; and producing videos for a variety of outputs. Change class schedule description: This course is a hands-on introduction to digital video to develop media
production skills for a variety of outputs, including online and Virtual Reality. Revise student learning outcomes; course content; course assignments; textbooks.

DEACTIVATIONS (Consent/Action)

These courses have not been taught in several years:
CS-174 Mobile App Programming in Android - Ron Sha
CS-178 XML - Ron Sha

SUBCOMMITTEE APPROVALS/REPORTS

Distance Education Subcommittee (Action)

DE Update – Robin Kurotori, Distance Education Subcommittee Chair

- DE Temporary Emergency Addendum
- New DE Addendum

Approved for Hybrid and Fully Online:
GA-100 History of Graphic Design
HLTH-150/ Women's Health Issues
WS-150
MM-100 Introduction to Concepts in Digital Media
MM-106 Advanced Interaction Design for Web and Mobile

Approved for Hybrid Only:
MATH-152 Algebra II

Noncredit (Information)

Noncredit Update – Robin Kurotori, Noncredit Coordinator
- P/SP/NP (Noncredit Grading Option)

General Education Subcommittee (Action)

Reaffirmations:
- Area IIIB, Humanities and Participatory Arts: ENGL-114
- Area IVA, English Composition: ENGL-114

New Approvals: None
Deny Reaffirmations: None
Deny New Approval: None
Remove from Plan A: None

Student Learning Outcomes and Assessment

None

COURSE REACTIVATION (Consent/Action)

BA-105 Income Tax Principles – Alexander Korniakov
72.00 hours lecture
Units: 4.00
Acceptable for Credit: CSU
The course provides an analysis of the principles, procedures, and terminology of income taxes on individual taxpayers. (GC).
MAJOR COURSE REVISIONS (Consent/Action)

BA-125  Introduction to Business – Rebecca Ozoa
Change catalog description: This survey course in business provides a multidisciplinary examination of how culture, society, economic systems, human behavior; and legal, international, political, and financial institutions interact to affect a business organization’s policy and practices within the United States and within a global society. This course demonstrates how these influences impact the primary areas of business, including organizational structure and design; leadership; human resource management; organized labor practices; marketing; organizational communication; technology; entrepreneurship; legal, accounting, and financial practices; the stock and securities market; and therefore affect a business’s ability to achieve its organizational goals. Revise student learning outcomes; course content; course assignments; methods of evaluation; textbooks.

CHEM-101A  General Chemistry – Lisa Wesoloski
Add prerequisite: Satisfactory performance in high school chemistry within the past two years. Remove prerequisites: Satisfactory performance on the Chemistry Placement Test at Ohlone College; CHEM-102. Add advisory: CHEM-102. Remove advisory: CAOT-150. Change catalog description: CHEM 101A is a general college-level inorganic chemistry course designed for students majoring in biology, chemistry, engineering, pre-med, and other fields demanding rigorous scientific preparation. Topics covered include atomic theory, stoichiometry, chemical reactions, introductory thermochemistry, theories of bonding, and the properties of solids, liquids, gases, and solutions. The course requires students purchase a lab coat, goggles with indirect venting and side shielding; a lab notebook and a calculator. Other supplies are optional. Change class schedule description: This course is the first half of general college chemistry series for science, pre-medical, and pre-engineering majors. Students are required to purchase a lab coat, goggles with indirect venting and side shielding a lab notebook, and a calculator. Revise student learning outcomes; course content; course assignments; methods of evaluation; methods of instruction; textbooks; supplies.

CHEM-112A  Organic Chemistry – Anu Ganguly
Change catalog description: CHEM-112A is the first semester of organic chemistry for science-oriented, pre-professional health, and pre-engineering students. This course includes a study of important organic molecules found in living systems and man-made molecules. This course is designed primarily for students who require a full year of organic chemistry, including complex multistep, organic mechanisms, nomenclature, and advanced spectroscopy. Students need to provide their own lab supplies such as lab coat; goggles with indirect venting and side shielding; gloves; calculator; and lab notebook. Change class schedule description: This organic chemistry course is for science majors, pre-professional health, and pre-engineering students. Students need to provide their own lab coat; goggles with indirect venting and side shielding; gloves; calculator; and lab notebook. Revise counselor information; student learning outcomes; course content; course assignments; methods of evaluation; methods of instruction; textbooks; supplies.

CHEM-112B  Organic Chemistry – Anu Ganguly
Change catalog description: CHEM-112B is the second semester of organic chemistry for science oriented pre-professional health and pre-engineering students. This course includes a study of important organic molecules found in living systems and man-made molecules. This course is designed primarily for students who require a full year of organic chemistry, including nomenclature, multistep synthesis, organic mechanisms, and advanced spectroscopy. Students need to provide their own lab supplies such as lab coat; goggles with indirect venting and side shielding; gloves; calculator; and lab notebook. Change class schedule description: This organic chemistry course is for science majors, pre-professional health, and pre-engineering
students. Students need to provide their own lab coat; goggles with indirect venting and side
shielding; gloves; calculator; and lab notebook. Revise counselor information; student learning
outcomes; course content; course assignments; methods of evaluation; methods of instruction;
textbooks; supplies.

DEAF-311 Introduction to American Deaf Culture – Thomas Holcomb
Remove advisory: Eligible for ENGL-151B and ENGL-163. Add advisory: DEAF-172RW.
Change catalog description: Designed for deaf and hard-of-hearing students, this course gives
them an opportunity to examine their journey toward Deafhood. Included in the course is an
examination of the disability versus cultural models, the terminologies associated with deaf
people, the evolution of the Deaf community, and the universality of the deaf experience. Taught
in ASL. Change class schedule description: Designed for deaf and hard-of-hearing students, the
course provides these students the opportunity to examine Deaf culture and its role in their
lives. Taught in ASL. Revise student learning outcomes; course content; course assignments;
methods of evaluation; methods of instruction; textbooks.

ENGI-114/ CNET-114 How Technology Works — Rose-Margaret Itua
Remove advisories: Eligible for ENGL-151B, ENGL-163, MATH-151. Change catalog
description: This course is intended for students of all disciplines who are interested in how
everyday things work. This course is an introduction to some of the fundamental science
concepts underpinning high technology, emphasizing everyday devices and practical
experience, for the development of scientific and computer literacy. Students experiment with
technology to discover principles of science. Concepts such as force, work, energy, power,
liquids and gasses, heat transfer, electricity, magnetism, electronics, and light are explored
through experimentation and observation. Students experience through class demonstrations
and hands-on laboratories the concepts presented by the instructor. Phenomena such as how
computers convert data, iPods transmit sound, air conditioners cool a room, solar heating
panels capture heat, and microwaves cook food are discussed. A laboratory session is included
which offers students the opportunity to do experiments. A field trip to local tech industry
displays is required. Change schedule description: Students experiment with everyday
technology to discover principles of science and engineering. Students are required to
participate in scheduled class field trips. Revise counselor information; methods of evaluation;
textbooks.

RE-117 Computer Applications in Real Estate — Long Nguyen
Revise course assignments; methods of evaluation; methods of instruction; textbooks.

RE-124 Legal Aspects of Real Estate – Long Nguyen
Revise catalog description: This course is a study of California real estate law including rights
incident to property ownership and management; agency; contracts; and application of real
estate transfer. Specific topics include conveyancing, probate proceedings, trust deeds,
foreclosure, and recent legislation governing real estate transactions. This course is one of the
required courses for the broker's license examination. Revise class description: This course
covers rights to property ownership and management; agency; contracts; and transfer. Revise
course assignments; methods of evaluation; methods of instruction; textbooks.
### NEW COURSES – CREDIT (Action)

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>AJ-250</td>
<td>Active Shooter Response Training – Libby Flores</td>
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</table>

27.00 hours lab  
Units: 0.50  
Prerequisites: AJ-220; Commission on Police Officer Standards and Training (POST) certified basic law enforcement academy diploma or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency. Familiarity with and ability to demonstrate all of these skills: office safety, department policy, active shooter procedures, officer down procedures.  
This course provides students with a background on active shooter situations along with policies and procedures for responding to various active shooter emergencies. This course is POST certified. Not applicable to associate degree. Repeatable = 9 times (CR).

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<td>CNET-156C</td>
<td>Enterprise Networking (CCNA ENSA) – Ron Sha</td>
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36.00 hours lecture  
54.00 hours lab  
Units: 3.00  
Accepted for Credit: CSU  
Advisory: CNET-155A  
This course in the CCNA curriculum describes the architectures and considerations related to designing, securing, operating, and troubleshooting enterprise networks. This course covers wide area network (WAN) technologies and quality of service (QoS) mechanisms used for secure remote access along with the introduction of software-defined networking, virtualization, and automation concepts that support the digitization of networks. Students gain skills to configure and troubleshoot enterprise networks, and learn to identify and protect against cybersecurity threats. Students are introduced to network management tools and learn key concepts of software-defined networking, including controller-based architectures and how application programming interfaces (APIs) enable network automation. (GC).

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<td>CS-142</td>
<td>Introduction to Programming with Python – Ron Sha</td>
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54.00 hours lecture  
54.00 hours lab  
Units: 4.00  
Accepted for Credit: CSU  
Cross-referenced Course: CNET-142  
This course is an introduction to computer programming using Python programming language. Using the popular Python programming language, students learn the use of basic Python constructs and standard libraries to develop software application programs. (GC)

### NEW COURSES – NONCREDIT (Action)

None

### REQUISITES (Action)

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CHEM-101A  General Chemistry – Lisa Wesoloski
Add prerequisite: Satisfactory performance in high school chemistry within the past two years

DEGREES/CERTIFICATES (Action)

Revised Certificates and Degrees:
Certificate of Accomplishment: Multimedia
Associate in Arts: Natural Science: Mathematics and Technology Emphasis

New Certificates and Degrees:
Certificate of Achievement: Engineering Technology Fundamentals
Certificate of Achievement: Smart Manufacturing Technology
Associate in Science: Smart Manufacturing Technology

Revised Degrees and Certificates

Multimedia: Certificate of Accomplishment – Isabel Reichert
The Multimedia Certificate of Accomplishment provides students with technical, artistic, and creative skills to develop graphics, animations, videos, web and interactive projects. The certificate helps prepare students for entry-level career opportunities with industries that require interactive/web content to support, enhance, and/or market their products and services.

Requirements for Certificate of Accomplishment:
   a. Complete satisfactorily the courses listed for the particular certificate.
   b. Complete at least 50% of the required units at Ohlone College.
   c. Maintain a 2.0 grade point average.

Student Learning Outcomes
   1. Solve communication problems by identifying and applying strategies of visual design including principles of visual organization/composition, information hierarchy, symbolic representation, typography, and story structure.
   2. Demonstrate an understanding of tools and technology to create multimedia projects.
   3. Demonstrate the ability to produce and optimize media for diverse audiences, contexts, and outputs.
   4. Employ best practices and management in the design profession and within a collaborative work environment.

MAJOR FIELD
GA-160A  Computer Graphics I OR  4
MM-105  Introduction to Web Design  3
MM-102A  Introduction to Multimedia  3
MM-109  2D Animation  3
MM-110  Digital Video for the Web and DVD  4

Total Units = 13 - 14

- Change catalog description.
- Change student learning outcomes.
- Add MM-105 as “or” with GA-160A.
- Change total units from 14 to 13-14.
Natural Science: Mathematics and Technology Emphasis: Associate in Arts – Andy Bloom

The Associate in Arts degree in Natural Science has three areas of emphasis: Biological Science; Physical Science; and Mathematics and Technology. Students may choose one of these emphases to earn a degree in Natural Science. These emphases will provide students with the knowledge and skills to succeed in a variety of science or technological careers. Graduates with an Associate in Arts in Natural Science will develop a strong foundation in the life sciences, physical sciences, and mathematics. Furthermore, the theoretical knowledge and laboratory skills acquired by students in these programs will also enhance their success with obtaining entry-level jobs that require two years of college-level science and math.

It is imperative that students entering Ohlone’s Associate in Arts degree in Natural Science meet with a counselor at the start of their academic work. Counselors will assist students in preparing a Student Education Plan that will prepare them to pursue their academic goals.

The Mathematics and Technology emphasis will enable students to develop a strong foundation in mathematics and technology. Furthermore, the theoretical knowledge and laboratory skills acquired by students in this emphasis will also enhance their success with obtaining entry-level jobs that require two years of college-level mathematics and technology courses. Courses prepare students for technical careers such as in information technology, systems administration, and networking.

Requirements for Associate in Arts Degree:
   a. Complete Major Field courses with a grade of C or better.
   b. Complete a minimum of twenty transferable units selected from one of the areas of emphasis, including a minimum of twelve units in the same department and an additional eight units from any of the courses within the emphasis.
   c. Complete Ohlone College General Education (Plan A), CSU GE (Plan B), or IGETC (Plan C) requirements. These requirements are specified in the Ohlone College catalog. Students who do not intend to transfer may complete Ohlone College General Education; students who intend to transfer may complete either CSU GE or IGETC. Counselors will advise students on the general education plan that best prepares them for pursuing an associate degree and/or transfer.
   d. Complete at least 60 degree applicable units with a 2.0 grade point average.
   e. Complete at least 12 units at Ohlone College.

Student Learning Outcomes
1. Gain knowledge and skills to succeed in a variety of science or technological careers.
2. Gain knowledge and skills to succeed in science majors at a baccalaureate university.

MATHEMATICS AND TECHNOLOGY EMPHASIS
This emphasis will enable students to develop a strong foundation in mathematics and technology. Furthermore, the theoretical knowledge and laboratory skills acquired by students in this emphasis will also enhance their success with obtaining entry-level jobs that require two years of college-level mathematics and technology courses. Courses prepare students for technical careers such as in information technology, systems administration, and networking.

Complete a minimum of twenty transferable units selected from this area of emphasis, including a minimum of twelve units in the same department, a minimum of three units in Mathematics, and a minimum of three units in technology (CS, CNET, ENGI, or MM).
CNET-105  PC Hardware and Software  4
CNET-155A Introduction to Networks (CCNA1)  3
CNET-155B Routing and Switching Essentials (CCNA2)  3
CNET-170  Network Security (Security+)  4
CS-101  Introduction to Computers and Information Technology  3
CS-102  Introduction to Computer Programming Using C++  3
ENGI-111 Programming and Problem-Solving in MATLAB  3
ENGI-114  How Technology Works  4
ENGI-135 Introduction To Robotics and Automated Systems  4
MATH-101A Calculus With Analytic Geometry  5
MATH-101B Calculus With Analytic Geometry  5
MATH-101C Calculus With Analytic Geometry  5
MATH-103  Introduction to Linear Algebra  3
MATH-104 Differential Equations  5
MATH-159 Introduction to Statistics  5
MATH-167 Calculus for Business and Social Science  5
MATH-186 Pre-Calculus I  4
MATH-187 Pre-Calculus II  4
MM-105  Introduction to Web Design  3

Total Units = 20

• Revise catalog description.
• Revise student learning outcomes.
• Remove CS-162, CS-178 so the courses can be deactivated.
• Remove MATH-181, MATH-188.
• Add MATH-186, MATH 187.

New Certificates and Degrees

Engineering Technology Fundamentals: Certificate of Achievement – Rose-Maragaret Itua
The Certificate of Achievement in Engineering Technology Fundamentals provides entry-level engineering technicians with the relevant basic knowledge and skills for various engineering technology and engineering industries. The certificate of achievement provides students the opportunity to progress in their Engineering/Engineering Technology education and achieve an associate degree in either Smart Advanced Manufacturing or Bioengineering. This certificate of achievement also provides a good introductory engineering foundation for transfer students.

Requirements for Certificate of Achievement:
   a. Complete Major Field courses.
   b. Complete at least six units at Ohlone College.
   c. Maintain a 2.0 grade point average in Major Field courses.

Student Learning Outcomes
   1. Apply basic scientific methods, scientific reasoning, engineering principles, techniques, and/or basic formulas to solve problems related to engineering technology.
   2. Demonstrate effective communication and teamwork by contributing productively to the success of team-based engineering technology projects.
**MAJOR FIELD**

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<td>Excel for the Sciences</td>
<td>0.5</td>
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<tr>
<td>CAOT-151</td>
<td>Mathematical Computation and Communication</td>
<td>0.5</td>
</tr>
<tr>
<td>COMM-111</td>
<td>Introduction to Public Speaking OR</td>
<td>3</td>
</tr>
<tr>
<td>ENGL-101A</td>
<td>Reading and Written Composition OR</td>
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<td>Introduction to Report and Technical Writing</td>
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<tr>
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<td>Introduction to Engineering</td>
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<td>ENGI-115</td>
<td>Engineering Graphics and Design</td>
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<tr>
<td>ETEC-113</td>
<td>Safety in Industry</td>
<td>1</td>
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<tr>
<td>MATH-186</td>
<td>Pre-Calculus I</td>
<td>4</td>
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<tr>
<td>MATH-187</td>
<td>Pre-Calculus II OR</td>
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<tr>
<td>PHYS-108</td>
<td>Survey of Physics</td>
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Total Units = 19 - 21

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**Smart Manufacturing Technology: Certificate of Achievement - Rose-Maragaret Itua**

The Certificate of Achievement in Smart Manufacturing Technology Program at Ohlone provides entry-level manufacturing technicians with the relevant knowledge and skills for the Smart Manufacturing Industry in the 21st Century. The certificate provides students with knowledge and skills of Smart Manufacturing processes, Safety in Industry, Industrial Internet of Things, and troubleshooting techniques. Students earning this certificate can progress and achieve the Associate in Science in Smart Manufacturing Technology.

Requirements for Certificate of Achievement:

1. Complete Major Field courses.
2. Complete at least six units at Ohlone College.
3. Maintain a 2.0 grade point average in Major Field courses.

**Student Learning Outcomes**

1. Apply basic scientific and engineering principles to solve problems in the manufacturing industry.
2. Demonstrate ability to work in a team on a project.
3. Operate relevant Smart Manufacturing Equipment such as Smart CNC Machines, Industrial Robotic Arms, Smart Factories, and Mechatronic Systems.

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<td>ENGI-101</td>
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<td>ENGI-130</td>
<td>Electric Circuit Analysis OR</td>
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<td>ETEC-106</td>
<td>Electronics for Technology</td>
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<td>ENGI-140</td>
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<td>ETEC-107</td>
<td>Properties of Materials</td>
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<td>Work-Based Project</td>
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<tr>
<td>ETEC-124</td>
<td>Introduction to Internet of Things</td>
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<tr>
<td>ETEC-126</td>
<td>Industrial Internet of Things-Industry Standard</td>
<td>3</td>
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Total Units = 20 - 24.5
**Smart Manufacturing Technology: Associate in Science – Rose-Maragaret Itua**

The Associate in Science in Smart Manufacturing Technology at Ohlone provides entry-level manufacturing technicians with the relevant knowledge and skills for Smart Manufacturing in the 21st Century. Students will have the opportunity to gain relevant knowledge and skills in Industry 4.0 standards, Industrial Internet of Things (IIoT), additive manufacturing, manufacturing processes, Safety in Industry, PLCs, electronic troubleshooting, and fabrication techniques. After successful completion of the Associate in Science in Smart Manufacturing Technology students can pursue a career as a Smart Factory Technician, Industry Standard 4.0 Technician, Robotic Technician, Mechatronics Technician, Industrial Technician, Manufacturing Technician, Electromechanical Technician, Process Technician, Maintenance Technician, or a Quality Control Technician.

Requirements for Associate in Science Degree:

a. Complete Major Field and Supporting Courses with a grade of C or better.

b. Complete Ohlone College (Plan A) General Education Requirements. These requirements are specified in the Ohlone College catalog.

c. Complete at least 60 degree-applicable units with a 2.0 grade point average.

d. Complete at least 12 units at Ohlone College.

**Student Learning Outcomes**

1. Operate relevant fabrication and manufacturing equipment such as CNC machines, mills, lathes, laser cutters, smart factories, 3D printers, etc.

2. Demonstrate understanding of Smart Advanced Manufacturing Processes including, but not limited to Industrial Internet of Things (IIoT)/Industry Standard 4.0.

3. Apply basic scientific and engineering principles to solve problems in the manufacturing industry.

4. Demonstrate ability to work in a team on a project.

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<td>ETEC-110</td>
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<td>ETEC-112</td>
<td>Manufacturing Processes</td>
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</tr>
<tr>
<td>PHYS-108</td>
<td>Survey of Physics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units = 41.5 - 46**
SUPPORTING COURSES
Complete one course from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNET-105</td>
<td>IT Essentials (CompTIA A+)</td>
<td>4</td>
</tr>
<tr>
<td>CNET-170</td>
<td>Network Security (Security+)</td>
<td>4</td>
</tr>
<tr>
<td>CNET-175</td>
<td>Cloud Security Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>ENGI-114</td>
<td>How Technology Works</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Units = 4
Total Units = 45.5 - 50

ISSUES (Action/Information)
None

ANNOUNCEMENTS
- Screening/Norming Meeting: Exact date and time TBD
- Issues Meeting: Monday, September 14, 2020, 3:00pm-5:00pm, 7101 and Zoom Video Conference