

CURRICULUM MODIFICATION PROPOSAL FORM

Title of Proposal	ENT Degree Program Update
Date	2022-08-29; revised 2023-08-24
Major or Minor	Major
Proposer's Name	John McCullough
Department	Entertainment Technology
Date of Departmental Meeting in which proposal was approved	2022-08-30; revision approved 2023-08-28
Department Chair Name	John McCullough
Department Chair Signature and Date	
Academic Dean Name	Gerarda Shields
Academic Dean Signature and Date	
Brief Description of Proposal (Describe the modifications contained within this proposal in a succinct summary. More detailed content will be provided in the proposal body.	This proposal updates many ENT course and degree program requirements to keep the ENT degree program in line with planned changes to the MTEC degree program in a concurrent proposal (22-02). This includes merging our electricity lecture and lab courses into a single course, updating the ENT degree program math requirement, updating the credits assigned to some courses, and updating course descriptions and prerequisites.

<p>Brief Rationale for Proposal (Provide a concise summary of why this proposed change is important to the department. More detailed content will be provided in the proposal body).</p>	<p>These changes respond to the conclusions of the recently completed MTEC Self-Study, and are part of the department's ongoing response to the 2017 ENT self-study and strategic plan. These changes are designed to increase the quantitative rigor of the program, and provide appropriate lab work time for our students to master the increasingly complicated and interconnected systems that are part of modern live entertainment events. Along with the changes proposed in the MTEC degree program update, cooperation and collaboration between the two programs in the department will be simplified and streamlined.</p>
<p>Proposal History (Please provide history of this proposal: is this a resubmission? An updated version? This may most easily be expressed as a list).</p>	<p>New proposal</p>

Please include all appropriate documentation as indicated in the Curriculum Modification Checklist.

For each new course, please also complete the New Course Proposal and submit in this document.

Please submit this document as a single .doc or .rtf format. If some documents are unable to be converted to .doc, then please provide all documents archived into a single .zip file.

ALL PROPOSAL CHECK LIST

Completed CURRICULUM MODIFICATION FORM including:	
• Brief description of proposal	X
• Rationale for proposal	
• Date of department meeting approving the modification	
• Chair's Signature	
• Dean's Signature	
Evidence of consultation with affected departments List of the programs that use this course as required or elective, and courses that use this as a prerequisite.	
Documentation of Advisory Commission views (if applicable).	
Completed Chancellor's Report Form .	

EXISTING PROGRAM MODIFICATION PROPOSALS

Documentation indicating core curriculum requirements have been met for new programs/options or program changes.	
Detailed rationale for each modification (this includes minor modifications)	

The following revisions are proposed for the Entertainment Technology Department

Program: Entertainment Technology

Program Code: STB

Effective Date: Fall 2023

A change of required courses

From	TO
General Education Required and Flexible Common Core	General Education Required and Flexible Common Core
ENG 1101 English Composition I (EC) 3	ENG 1101 English Composition I (EC) 3
ENG 1121 English Composition II (EC) 3	ENG 1121 English Composition II (EC) 3
MQR Mathematical and Quantitative Reasoning 3	<u>MAT 1275CO College Algebra and Trigonometry (or higher) 4</u>
LPS Life and Physical Sciences 3	LPS Life and Physical Sciences 3
WCGI World Cultures and Global Issues 3	WCGI World Cultures and Global Issues 3
USED US Experience in its Diversity 3	USED US Experience in its Diversity 3
IS Individual and Society 3	IS Individual and Society 3
CE Creative Expression 3	CE Creative Expression 3
SW Scientific World 3	SW Scientific World 3
Add. Flex Core Additional Flexible Common Core Course 3	Add. Flex Core Additional Flexible Common Core Course 3
COM 1330 Public Speaking or higher 3	COM 1330 Public Speaking or higher 3
ID Interdisciplinary Course 3	ID Interdisciplinary Course 3
LibArt Liberal Arts Elective 3	LibArt Liberal Arts Elective 3
OR	OR
WL World Language Sequence 3	WL World Language Sequence 3
LibArt Liberal Arts Elective 1 3	LibArt Liberal Arts Elective 1 3
OR	OR
WL World Language Sequence 1 3	WL World Language Sequence 1 3
Program Specific Degree Requirements	Program Specific Degree Requirements
ENT 1100 Introduction to Entertainment Technology (WI) 3	ENT 1100 Introduction to Entertainment Technology (WI) 3
CST 1101 Problem Solving with Computer Programming 3	<u>MTEC 1201 Computer Programming for Interactive Media I 3</u>
ENT 1102 Health and Safety in Production 1	ENT 1102 Health and Safety in Production 1
ENT 1106 Technical Production Skills 1	

ENT 1108 Entertainment Drafting I — 3	ENT 1106 Technical Production Skills 1
ENT 1110 Scenery Construction — 3	ENT 1108 Entertainment Drafting I 3
ENT 1190 Video Technology — 3	ENT 1110 Scenery Construction 3
ENT 1201 Basic Electricity for Live Entertainment — 1	ENT 1190 Video Technology 3
ENT 1203 Basic Electricity for Live Entertainment Lab — 1	<u>ENT 1204 Basic Electricity for Live Entertainment 2</u>
ENT 1250 Lighting Technology — 3	ENT 1250 Lighting Technology 3
ENT 1270 Sound Technology I — 3	ENT 1270 Sound Technology I 3
ENT 2200 Entertainment Drafting II — 3	ENT 2200 Entertainment Drafting II 3
ENT 2280 Introduction to Show Networking — 3	ENT 2280 Introduction to Show Networking 3
ENT 3320 Technical Production (2 credit must take 3 times) — 2	ENT <u>3106</u> Technical Production (<u>3 credit must take 2 times</u>) 3
ENT 4430 Project Management (WI) — 3	ENT 4430 Project Management (WI) 3
ENT 4498 Career Seminar — 1	OR
ENT 4499 Culmination Project — 2	<u>MTEC 3501 Culmination Project Development (WI) 3</u>
ENT 4900 Internship in Entertainment Technology — 3	
 Program-Specific Entertainment Technology Modules Select 2 Modules for a total of 18 credits	
VIDEO	
ENT 2290 Video Studio Operations — 3	ENT 4498 Career Seminar 1
ENT 3190 Video Editing Skills — 3	ENT <u>4501</u> Culmination Project 3
ENT 4390 Advanced Video Editing — 3	ENT 4900 Internship in Entertainment Technology 3
SCENERY	
ENT 2210 Advanced Scenery Construction — 3	 Program-Specific Entertainment Technology Modules Select 2 Modules for a total of 18 credits
ENT 3200 Introduction to Scene Design — 3	VIDEO
AND —	ENT 2290 Video Studio Operations 3
ENT 3400 Stage Rigging and Mechanics (if in Lighting Module) — 3	ENT 3190 Video Editing Skills 3
ENT 4410 Technical Direction — 3	ENT 4390 Advanced Video Editing 3
LIGHTING	SCENERY
ENT 2350 Lighting Controls for Stage and Studio — 3	ENT 2210 Advanced Scenery Construction 3
ENT 3200 Introduction to Scene Design — 3	ENT 3200 Introduction to Scene Design 3
AND —	AND
ENT 3400 Stage Rigging and Mechanics (if in Scenery Module) — 3	ENT 3400 Stage Rigging and Mechanics (if in Lighting Module) 3
ENT 4450 Lighting Design — 3	ENT 4410 Technical Direction 3
SOUND	LIGHTING
ENT 2370 Sound Technology II — 3	ENT 2350 Lighting Controls for Stage and Studio 3
ENT 3390 Sound for Multimedia — 3	ENT 3200 Introduction to Scene Design 3
	AND
	ENT 3400 Stage Rigging and Mechanics (if in Scenery Module) 3

OR

MTEC 2240 Music Technology 3

OR

MTEC 2260 Music Synthesis and Sampling 3

ENT 4470 Sound Design 3

OR

ENT 4475 Sound Systems 3

LIVE EVENT MANAGEMENT

ENT 2102 Event Safety 3

ENT 3430 Stage Management 3

ENT 4440 Live Event Management 3

Program-Specific Elective Courses

Take as needed to equal 120 credits.

Additional Entertainment Technology Elective Courses

Select a minimum of 6 credits from the following

MTEC xxxx Any courses

ENT 2140 Basic Welding (Fall only) 2

ENT 3290 Digital Video Camera 3

ENT 3300 Advanced Scenery Drafting 2

ENT 3310 Monster Shop 2

ENT 3320 Technical Production (4th, 5th, 6th time class repeated above major requirement) 2

ENT 3330 Entertainment Video Systems 3

ENT 3350 Lighting Production Techniques 3

ENT 3400 Stage Rigging and Mechanics 3

ENT 3430 Stage Management 3

ENT 4500 Special Topics in Entertainment Technology 3

ENT 4901 Internship in Entertainment Technology II 3

IS 9010 Independent Study

ENT Bachelor of Technology Elective Courses

For the remaining credits, also allow selection from the following:

COMD xxxx Any courses (Not COMD 2320 if ENT 1190 taken)

AFR 1321 Black Theater 3

ENT 4450 Lighting Design 3

SOUND

ENT 2370 Sound Technology II 3

ENT 3390 Sound for Multimedia 3

OR

MTEC 2240 Music Technology 3

OR

MTEC 2260 Music Synthesis and Sampling 3

ENT 4470 Sound Design 3

OR

ENT 4475 Sound Systems 3

LIVE EVENT MANAGEMENT

ENT 2102 Event Safety 3

ENT 3430 Stage Management 3

ENT 4440 Live Event Management 3

Program-Specific Elective Courses

Take as needed to equal 120 credits.

<p> BUS 1122 Business Law — 3 BUS 2339 Financial Management — 3 MKT 1103 Foundations of Marketing and Sales — 3 CST 1201 Programming Fundamentals — 3 CST 1204 Database Systems Fundamentals — 3 CST 2301 Multimedia and Mobile Device Programming — 3 CST 2403 Introductory C++ Programming Language Part I — 3 CST 3503 C++ Programming Part II — 3 ENG 2400 Films from Literature — 3 ARTH xxxx Any courses — MUS xxxx Any courses — THE xxxx Any courses — PERF 1132 Music Workshop: Guitar — 2 IND 2313 Industrial Design I (Fall only) — 2 MECH 1101 Manufacturing Processes Laboratory — 1 MECH 1201 Computer-Aided Manufacturing Systems — 3 MECH 1234 Statics and Strength of Materials — 3 MAT 1375 Precalculus or higher (not used in Gen Educ. Common Core) — 4 </p>	
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Rationale:

These changes are the culmination of a few years' worth of content changes in the program. The initial course content changes have been going well, and now it is time to take the next step and expand those changes into full program changes. These changes fall into a few categories: Credit Changes; New MTEC Courses; Degree Requirement and Prerequisite changes

Credit Changes

The entertainment industry has become increasingly complex, technologically. In order for students to master the tools, techniques, and technology of a modern live event, they need to have the opportunity to take real responsibility for a department event and see the impact of their work on the show. In a school environment, students need to have both the time and support structure in place so that they can try new things, make mistakes, and learn from them. Recently, we have struggled to find the time necessary to accomplish this for our shows. To keep up with the changes in the industry, we have decided to change the credit and lab hours for ENT 3106 Technical Production and ENT 4501 Culmination Project. This will allow more time for hands-on instruction in ENT 3106 and additional mentoring time in ENT 4501 so that our students can be well-supported through an iterative production process.

New MTEC Courses

A concurrent proposal from the MTEC program (proposal 22-02) creates two new courses that are relevant to the ENT degree program. As a result, we have adjusted our degree requirements to include the new MTEC classes.

Degree Requirement and Prerequisite Changes

We have decided to increase the MQR requirement from MAT 1190 to MAT 1275CO or higher. When Pathways was implemented the department opted to accept any MQR course for the ENT program, but this is no longer in line with the goals for the program. The new MTEC 1201 course requires MAT 1275 or higher, and some ENT courses will also benefit from a more rigorous math requirement, such as ENT 2200 and ENT 3400. In addition to these requirement changes, many prerequisites needed to be updated for consistency with other changes in this proposal. We have decided to remove elective course restrictions. With the addition of academic minors, this change allows ENT students to pursue a minor with fewer required course substitutions. The entertainment industry is also inherently inter- and multi-disciplinary. ENT students will benefit from being able to pursue their own academic interests.

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Entertainment Technology Department
ALL ENT and MTEC Courses

From:		To:	
Course Number:		Course Number:	
Course Title:		Course Title:	
Description:		Description:	<p><u>For hybrid and online sections, minimum technology requirements are a working camera and microphone. Students are to switch both on at the instructor's request.</u></p> <p>*This text is to be appended to the course description of every ENT and MTEC course.</p>
Class Hours :		Class Hours:	
Lab Hours :		Lab Hours:	
Credits:		Credits:	
Prerequisite:		Prerequisite:	
Corequisites:		Corequisites:	
Pre- or corequisites:		Pre- or corequisites:	

Rationale:

Online and Hybrid courses are going to remain a vital part of our curriculum for the foreseeable future, and being able to set the expectation of voice and video participation is necessary to ensure that our students are receiving the preparation and training necessary for the team-based, collaborative environment of the entertainment and multimedia industries.

ENT 1190 Video Technology

From:		To:	
Course Number:		Course Number:	
Course Title:		Course Title:	
Description:	<p>An introduction to the basic components and practices of pre-production and production methodologies for content creation in video production. Through lectures, reading assignments, screenings and practice, students cover the basics of all stages of production inclusive of the processes of forming and working in production management teams, creating effective production aesthetics in pre-production and production stages, and storyboarding, camerawork aesthetics (basic lighting and camera), and editing according to the storyline, design and graphics functions. This is a survey course, in which students perform and demonstrate the different stages of video production to produce short videos.</p>	Description:	<p><u>An introduction to the basic components and practices of preproduction and production methodologies for content creation in commercial video production. Through lectures, reading assignments, screenings, and practice, students learn the basics of all stages of production, including the processes of forming and working in production management teams, creating effective production aesthetics in pre-production and production stages, content and storyboarding, and story structure in editing. Basics of video technology such as video signal and audio components are also explored.</u></p>
Class Hours :		Class Hours:	
Lab Hours :		Lab Hours:	
Credits:		Credits:	
Prerequisite:		Prerequisite:	
Corequisites:		Corequisites:	

Pre- or corequisites:	ENT 1201	Pre- or corequisites:	ENT 1204
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Rationale:

ENT 1190 (Video Technology) is a requirement for all ENT majors. As such, the course includes the standard content of conventional intro video production survey courses, but also additional elements focusing on technology, such as video signal and audio components, that are of interest to all ENT majors. This also updates the pre- or co-requisite to match other changes included in this proposal

ENT 1203 Basic Electricity for Live Entertainment Lab

From:		To:	
Course Number:	ENT 1203	Course Number:	ENT 1204
Course Title:	Basic Electricity for Live Entertainment Lab	Course Title:	Basic Electricity for Live Entertainment
Description:	Hands-on lab reinforcing and extending the entertainment-related electrical concepts covered in ENT 1103, Basic Electricity for Live Entertainment. Students will gain hands-on experience with live entertainment electrical technologies, learn to use basic measurement tools and test equipment, while extending their understanding of the electrical concepts introduced in ENT 1103. Specific labs will be drawn from entertainment fields of lighting, sound, video, and scenic automation.	Description:	<u>An introduction to the uses of electricity in entertainment in accordance with applicable codes and industry best practices. Fundamentals of electrical circuits and electricity such as voltage, current, power and resistance are introduced, along with power generation and distribution methods used in entertainment. Ohm's law and Watt's law are explored, using practical examples from the field. Simple electrical circuits are introduced and constructed in labs. Testing equipment will be introduced. Entertainment-specific connector types and procedures are covered and explored through hands-on lab work drawn from entertainment disciplines including lighting, sound, video, and scenic automation.</u>

			<u>Electrical safety standards and practice are introduced.</u>
Class Hours :		Class Hours:	<u>1</u>
Lab Hours :	2	Lab Hours:	<u>2</u>
Credits:	4	Credits:	<u>2</u>
Prerequisite:	ENT 1100	Prerequisite:	<u>ENT 1100</u>
Corequisites:		Corequisites:	
Pre- or corequisites:	ENT 1201	Pre- or corequisites:	

Rationale:

The Entertainment Technology Department developed the ENT 1201 (then ST-103) Basic Electricity class in the mid 2000s as a first-semester class. We eventually added the ENT 1203 lab, but wanted to keep it separate from the lecture and after the first semester. At that time, hands-on lab work was spread out through other Lighting, Sound, Entertainment Control Systems and Show Control classes. Somewhere around 2010—to address the sequencing of the lab work—we combined the labs from the various individual classes and into the single ENT-1203 lab class, with the lecture class as a prerequisite. Eventually we found that students who were just starting out in the field were struggling with the context of the ENT 1201 lecture class in their first semester, so we changed prerequisites to push it into the second semester, with the ENT 1203 lab class allowed as a co-requisite. Over the years, some overlap has developed between the two courses, and with students able to take the lab as pre- or corequisite students they might get the material in different sequences.

Given that, the department now feels that it's best to consolidate the two courses into one single course: ENT 1204. This will allow strengthening learning outcomes in that the material can be taught with the traditional lecture/lab format in a consistent sequence for all students, and simplify enrollment by having students schedule one class instead of two. The position of the class in the general curriculum sequence remains the same.

ENT 1250 Lighting Technology

From:		To:	
Course Number:		Course Number:	
Course Title:		Course Title:	
Description:		Description:	
Class Hours :		Class Hours:	
Lab Hours :		Lab Hours:	
Credits:		Credits:	
Prerequisite:		Prerequisite:	
Corequisites:		Corequisites:	
Pre- or corequisites:	<u>ENT 1203</u>	Pre- or corequisites:	<u>ENT 1204</u>

Rationale:

Updates pre- or co-requisite to match other changes in this proposal.

ENT 1270 Sound Technology I

From:		To:	
Course Number:		Course Number:	
Course Title:		Course Title:	
Description:		Description:	
Class Hours :		Class Hours:	
Lab Hours :		Lab Hours:	
Credits:		Credits:	
Prerequisite:		Prerequisite:	
Corequisites:		Corequisites:	
Pre- or corequisites:	<u>ENT 1203</u>	Pre- or corequisites:	<u>ENT 1204</u>

Rationale:

Updates pre- or co-requisite to match other changes in this proposal.

ENT 2200 Entertainment Drafting II

From:		To:	
Course Number:		Course Number:	
Course Title:		Course Title:	
Description:		Description:	
Class Hours :		Class Hours:	
Lab Hours :		Lab Hours:	
Credits:		Credits:	
Prerequisite:	ENT 1108	Prerequisite:	ENT 1108 <u>and MAT 1275CO or higher</u>
Corequisites:		Corequisites:	
Pre- or corequisites:	ENT 1110 or ENT 1250	Pre- or corequisites:	ENT 1110 or ENT 1250 <u>or MTEC 2250</u>

Rationale:

The MAT 1275CO or higher prerequisite is being added here to bring this course in line with the proposed change to require MAT 1275CO or higher as a degree requirement. This course requires significant quantitative reasoning skills to successfully complete. The MTEC 2250 pre- or co-requisite is being added to give Emerging Media students a path into this course.

ENT 2290 Video Studio Operations

From:		To:	
Course Number:		Course Number:	
Course Title:		Course Title:	
Description:	<p>An introduction to and overview of the basic techniques and components used in commercial video and film production. Students will work in teams and individually to explore principles of production. Introduction to equipment, process and terminology will be reinforced by readings, lectures and hands-on exposure. A study of the preproduction process, shooting schedules, camera, lighting, and audio operation, and post-production techniques will be explored. Differences between studio and location shooting will be covered. This course is intended as the first of a series of courses designed to provide greater competency in both technical and artistic aspects of this important industry.</p>	Description:	<p><u>An introduction to the use of cameras and video switchers in multi-camera settings. Through lectures, demonstrations, and exercises, students explore camera positions, camerawork, lighting techniques, aesthetics, video and audio signals, and roles of crew members. Students gain experience in practical live and recording production in a studio, with an emphasis on planning, production management, execution, and teamwork.</u></p>
Class Hours :		Class Hours:	
Lab Hours :		Lab Hours:	
Credits:		Credits:	
Prerequisite:		Prerequisite:	
Corequisites:		Corequisites:	

Pre- or corequisites:		Pre- or corequisites:	
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Rationale:

ENT 2290 (Video Studio Operations) will emphasize multi-camera operations that involve a video switcher. This was not mentioned in the original course description. Learning to operate these technologies is an appropriate preparation for work in the industry.

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ENT 3320 Technical Production

From:		To:	
Course Number:	ENT 3320	Course Number:	<u>ENT 3106</u>
Course Title:		Course Title:	
Description:	<p>90 lab hrs</p> <p>Supervised laboratory in the technical areas of production. Hands-on experience in the planning, construction, rigging and running of productions to learn backstage procedures and operations in a performance situation. Emphasis placed on careful pre-planning, appropriate safety procedures and on follow-up critiques and evaluation of the work done. Assignments will be made on the basis of the ability and the prior achievements of each student, assuring a variety of work experiences. Each succeeding semester will involve a greater degree of production responsibility. ENT3320 is required to be taken 3 times in the major for 6 credits. Course may be taken as an elective 3 additional times for 6 elective credits.</p>	Description:	<p><u>Supervised laboratory in the technical areas of live, video, and/or multimedia production. Students will gain hands-on experience in the planning and implementation of production procedures and operations, with an emphasis on careful pre-planning, appropriate safety procedures and on follow-up critiques and evaluation of the work done. Assignments will be made on the basis of the ability and the prior achievements of each student, assuring a variety of work experiences.</u></p> <p>ENT 3106 is required to be taken <u>twice</u> in the major for 6 credits. Course may be taken as an elective <u>2</u> additional times for 6 elective credits.</p>
Class Hours :		Class Hours:	
Lab Hours :	6	Lab Hours:	<u>9</u>
Credits:	2	Credits:	<u>3</u>
Prerequisite:	<p>ENT 1100 and ENT 1106*</p> <p>*ENT 1106 is not a prerequisite if MTEC 1102 has been taken</p>	Prerequisite:	<u>ENT 1106 or Department Permission</u>

Corequisites:		Corequisites:	
Pre- or corequisites:	ENT 1110 or ENT 1190 or ENT 1250 or ENT 1270 or MTEC 1102	Pre- or corequisites:	ENT 1110 or ENT 1190 or ENT 1250 or ENT 1270

Rationale:

ENT 3106 – Technical Production is a core experience in the Entertainment Technology or Emerging Media Technology student's career at City Tech. Participation in hands-on, practical experiences is critical for both degree programs. The goal is to guide the student to become a collaborator and effective participant within their assigned team and the other production areas culminating in a live performance or realized media project. The evolving nature of the live event and multimedia production industries, and the increasingly sophisticated tools and software being used in this class necessitated adding an additional credit hour and additional lab time to ensure each student gets enough instruction time to master the course content. The pre-requisites are being changed to bring this course in line with updates in other classes and to make the course sequence more understandable for students.

ENT 3400 Stage Rigging and Mechanics

From:		To:	
Course Number:		Course Number:	
Course Title:		Course Title:	
Description:		Description:	
Class Hours :		Class Hours:	
Lab Hours :		Lab Hours:	
Credits:		Credits:	
Prerequisite:	ENT 1110, ENT 3320	Prerequisite:	ENT 1110, ENT <u>3106</u> , <u>MAT 1275CO</u> or higher
Corequisites:		Corequisites:	
Pre- or corequisites:		Pre- or corequisites:	

Rationale:

Stage rigging requires a solid foundation in algebra and trigonometry, and we have found that students have not been as successful in this class since we changed our dept math requirement to MAT 1190. We believe that restoring MAT 1275CO or higher as a prerequisite for ENT 3400 (and as the required math class for the major) will help students be more successful in the program and in ENT 3400 specifically.

ENT 4430 Project Management

From:		To:	
Course Number:		Course Number:	
Course Title:		Course Title:	
Description:		Description:	
Class Hours :		Class Hours:	
Lab Hours :		Lab Hours:	
Credits:		Credits:	
Prerequisite:	<i>ENT 3320 and (ENT 2210 or ENT 2370 or ENT 2350 or ENT 3290 or MTEC 3140)</i>	Prerequisite:	<i><u>ENT 3106</u> and (ENT 2210 or ENT 2370 or ENT 2350 or ENT 3290 or MTEC 3140)</i>
Corequisites:		Corequisites:	
Pre- or corequisites:		Pre- or corequisites:	

Rationale:

Updates prerequisite to match other changes in this proposal.

ENT 4480 Show Systems Integration

From:		To:	
Course Number:		Course Number:	
Course Title:		Course Title:	
Description:		Description:	
Class Hours :		Class Hours:	
Lab Hours :		Lab Hours:	
Credits:		Credits:	
Prerequisite:	ENT 2280, MTEC 2280	Prerequisite:	ENT 2280, <u>MTEC 1201</u>
Corequisites:		Corequisites:	
Pre- or corequisites:		Pre- or corequisites:	

Rationale:

This update brings the course prerequisites into line with other course content changes in the department.

ENT 4499 Culmination Project

From:		To:	
Course Number:	ENT 4499	Course Number:	<u>ENT 4501</u>
Course Title:		Course Title:	
Description:		Description:	
Class Hours :	4 cl hr, a minimum of 5 independent study hrs per wk	Class Hours:	<u>2</u> cl hr, a minimum of <u>7</u> independent study hrs per wk
Lab Hours :		Lab Hours:	
Credits:	<u>2</u>	Credits:	<u>3</u>
Prerequisite:	6 credits of ENT 3320 (3 courses), ENT 4430 and (ENT 4390 or ENT 4410 or ENT 4450 or ENT 4470 or ENT 4480 or MTEC 4800 or MTEC 4801)	Prerequisite:	<u>ENT 4430 or MTEC 3501; department approval</u>
Corequisites:	ENT 4498	Corequisites:	
Pre- or corequisites:		Pre- or corequisites:	

Rationale:

ENT4501 Culmination project is the final capstone in the student's career at City Tech. Participation in a final project is critical for the Entertainment Technology and Emerging Media Technology degrees. Each degree contains specialized training in one or two technical areas and each student's pathway is unique as each selects their specialty and electives to focus their studies. The diversity of interests leads each student to develop a unique final project. The goal is to guide the student to become a collaborator and effective team member. This course uniquely meets needs and fulfills a unique role in the ENT and MTEC programs. Because each student develops a culmination project collaborating within a peer group the experience of participating allows the student to be in the moment inside a live event. The career pathway for production professionals requires hands-on experience. The creation and presentation of a senior level project allows our students to build technical skills and personal confidence. Having a good grounding in teamwork will make the City Tech Alumni an asset to any production team. Entertainment Technology students can benefit from

this course at the end of their college career. As the programs have grown over the years, students have become more and more ambitious in their project proposals. These more ambitious projects are excellent practice for their careers, and often generate useful portfolio pieces for students to use as they apply for jobs and graduate programs, but require more support and more class time than we initially allocated for this class. We believe expanding ENT 4501 to 3 credits will allow us to properly support this larger scale of project.

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CURRICULUM MODIFICATION PROPOSAL FORM

This form is used for all curriculum modification proposals. See the [Proposal Classification Chart](#) for information about what types of modifications are major or minor. Completed proposals should be emailed to the Curriculum Committee chair.

Title of Proposal	Merging ENT Electricity Lecture and Lab Class
Date	May 25, 2022; revised 2023-08-24
Major or Minor	Major
Proposer's Name	John Huntington
Department	Entertainment Technology
Date of Departmental Meeting in which proposal was approved	May 25, 2022; revised version approved 2023-08-28
Department Chair Name	John McCullough
Department Chair Signature and Date	
Academic Dean Name	Gerarda Shields
Academic Dean Signature and Date	
Brief Description of Proposal (Describe the modifications contained within this proposal in a succinct summary. More detailed content will be provided in the proposal body).	Combine the 1 credit ENT 1201 <i>Basic Electricity for Live Entertainment</i> and the 1 credit, 2 hour ENT 1203 <i>Basic Electricity for Live Entertainment Lab</i> into a single ENT 1204 <i>Basic Electricity for Live Entertainment</i> class with 1 lecture hour and 2 lab hours
Brief Rationale for Proposal (Provide a concise summary of why this proposed change is important to the department. More detailed content will be provided in the proposal body).	We originally developed the ENT 1201 Basic Electricity class as a first-semester class. We eventually added the ENT 1203 lab, but wanted to keep it separate from the lecture and have students take it after the first semester. Subsequently, we pushed the ENT 1201 lecture class to the second semester, and now it makes sense to combine them back together to strengthen learning outcomes.

Proposal History (Please provide history of this proposal: is this a resubmission? An updated version? This may most easily be expressed as a list).	This is a new submission
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Please include all appropriate documentation as indicated in the Curriculum Modification Checklist.

For each new course, please also complete the New Course Proposal and submit in this document.

Please submit this document as a single .doc or .rtf format. If some documents are unable to be converted to .doc, then please provide all documents archived into a single .zip file.

ALL PROPOSAL CHECK LIST

Completed CURRICULUM MODIFICATION FORM including:	
• Brief description of proposal	✓
• Rationale for proposal	✓
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• Chair's Signature	
• Dean's Signature	
Evidence of consultation with affected departments	n/a
List of the programs that use this course as required or elective, and courses that use this as a prerequisite.	✓
Documentation of Advisory Commission views (if applicable).	n/a
Completed <u>Chancellor's Report Form</u> .	

EXISTING PROGRAM MODIFICATION PROPOSALS

Documentation indicating core curriculum requirements have been met for new programs/options or program changes.	n/a
Detailed rationale for each modification (this includes minor modifications)	✓

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Rationale For Proposal

The Entertainment Department developed the ENT 1201 (then ST-103) Basic Electricity class in the mid 2000s as a first-semester class. We eventually added the ENT 1203 lab, but wanted to keep it separate from the lecture and after the first semester. At that time, hands-on lab work was spread out through other Lighting, Sound, Entertainment Control Systems and Show Control classes. Somewhere around 2010—to address the sequencing of the lab work—we combined the labs from the various individual classes and into the single ENT-1203 lab class, with the lecture class as a prerequisite. Eventually we found that students who were just starting out in the field were struggling with the context of the ENT 1201 lecture class in their first semester, so we changed prerequisites to push it into the second semester, with the ENT 1203 lab class allowed as a co-requisite. Over the years, some overlap has developed between the two courses, and with students able to take the lab as pre- or corequisite students they might get the material in different sequences.

Given that, the department now feels that it's best to consolidate the two courses into one single course: ENT 1204. This will allow strengthening learning outcomes in that the material can be taught with the traditional lecture/lab format in a consistent sequence for all students, and simplify enrollment by having students schedule one class instead of two. The position of the class in the general curriculum sequence remains the same.

ENT 1204 Basic Electricity for Live Entertainment

Proposed Syllabus

2 credits: 1 lecture hour, 2 lab hours

Prerequisite: ENT 1100

Course Description:

An introduction to the uses of electricity in entertainment in accordance with applicable codes and industry best practices. Fundamentals of electrical circuits and electricity such as voltage, current, power and resistance are introduced, along with power generation and distribution methods used in entertainment. Ohm's law and Watt's law are explored, using practical examples from the field. Simple electrical circuits are introduced and constructed in labs. Testing equipment will be introduced. Entertainment-specific connector types and procedures are covered and explored through hands-on lab work drawn from entertainment disciplines including lighting, sound, video, and scenic automation. Electrical safety standards and practice are introduced.

Grades:

Your grade will be determined as follows:

Tests (Midterm 15%, Final 20%)	35%
Labs/Projects	40%
Quizzes	15%
Class Participation/Attitude	10%

Weekly Topics

	Topic
1	Lecture: Introductions, matter, electron theory, magnetism Lab: Wiring switches and LEDs Assignment: Required Tools
2	Lecture: electricity, magnetism Lab: Wiring power cables: Edison Plug Assignment Due: Required Tools
3	Lecture: Uses of electricity and electromagnetism, The electrical circuit, Ohm's and Watt's law calculations Lab: Wiring power cables: Pin Plug
4	Lecture: Series Circuits, Parallel Circuits Lab: Wiring Switches and LED's in Series and Parallel
5	Lecture: Multimeter use, AC vs DC voltage Reading Lab: Using multimeter on a variety of components
6	Lab: Ohm's law and Watt's law with meters Review for Written Midterm, Practical Midterm
7	Written Midterm Practical Midterm
8	Lecture: AC Power, Entertainment Power overview Lab: Metering and technology hunt, cable types and ampacity
9	Over-current protection devices, Wire Gauge, Shielded vs Unshielded, National Electric Code NEC and Article 520 Lab: Relay Lab Assignment: Get Solder Practice Kit
10	Lab: Breaker Lab Assignment: NEC Project
11	Lecture/Demo: Soldering Lab: Solder Practice Kit Assignment: Final Kit Project
12	Lab: Soldering XLR
13	Lab: Work on Kit Project in Class Assignment due: NEC Project
14	Assignment due: Present Kit Final Project in Class Review for Final
15	Written final exam

Learning Outcomes

After taking this class, the student will be able to...	This will be demonstrated by...
Recognize and use appropriate terminology for entertainment electrical systems and theory.	Tests, assignments, class participation
Evaluate an entertainment electronic device for power requirements	Read the manual and report on the electrical ratings for safe use of the device.
Identify and describe an entertainment electrical circuit.	Tests, assignments
Recognize and use correct symbols on a circuit diagram	Tests, Homework assignments
Perform calculations using Ohm's Law and Watt's law. Apply them in example entertainment electrical systems.	Tests, Homework assignments
Perform calculations on series and parallel circuits. Apply them in example entertainment electrical circuits	Tests, homework assignments

Identify common electrical hazards in the entertainment workplace.	Tests, homework assignments
Identify commonly used electrical cables and their safe usage in entertainment.	Tests, homework assignments
Assemble a variety of electrical connectors and circuits used in entertainment.	Projects and labs
Learn safe soldering operations of electrical connectors, components and circuit boards used in entertainment.	Projects and labs
Acquire a set of tools and learn how to use them.	Projects and labs
Correctly use a multimeter to measure active and passive electrical circuits used in entertainment.	Projects and labs

Gen Ed Learning Outcomes

After taking this class, the student will be able to...	This will be demonstrated by...
Systems: Understand and Navigate Systems	Take circuit diagrams and assemble systems from the diagrams.

Research	Use the internet to locate and acquire appropriate kits and N.E.C. codes and review class topics
Presentation and dissemination of information	Students are required to present their successfully completed kit, along with video footage of the assembly process. Students are also required to write a paper based on technical information about a standard product in the field

Systems: Understand and Navigate Systems	Identify components of simple circuits.
Apply information from a variety of sources.	Students will use textbooks, electrical codes, manuals, and internet searches in different homework assignments.
Employ quantitative reasoning	Perform electrical calculations to determine voltage, amperage, wattage and resistance of a variety of different circuits. Word problems of real world problems are used.

Programs That Use This Course as Required or Elective and Courses That Use This as a Prerequisite

Note Existing courses:

ENT 1201 Basic Electricity for Live Entertainment

ENT 1203 Basic Electricity for Live Entertainment Lab

Course	Relation
ENT 1190 - Video Technology	Pre- or corequisite: ENT 1201
ENT 1203 - Basic Electricity for Live Entertainment Lab	Pre- or corequisite: ENT 1201
ENT 1250 - Lighting Technology	Pre- or corequisite: ENT 1203
ENT 1270 - Sound Technology I	Pre- or corequisite: ENT 1203

