CURRICULUM MODIFICATION PROPOSAL
Title: Emerging Media Technology B.Tech Program Modification, Phase Two

Prepared by Adam Wilson (primary contact), Hosni Auji, Allison Berkoy, and John McCullough

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New York City College of Technology, CUNY

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	**Emerging Media Technology Program Modification, Phase Two**
Date	**9/26/2023**
Major or Minor	**major**
Proposer's Name	**Adam Wilson (primary contact), Hosni Auji, Allison Berkoy, and John McCullough**
Department	**Entertainment Technology**
Date of Departmental Meeting in which proposal was approved	**9/26/2023**
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.	- Re-organize our four existing concentrations into three primary focus areas (mandatory; students take 15 credits from any combination of areas) and four secondary focus areas (students take up to 12 credits from recommended areas or from other courses chosen in consultation with an advisor). Students will no longer have to formally declare a concentration. Current concentrations include Game Design and Interactive Media, Music Technology, Physical Computing, and Media Computation. New primary focus areas include Game Development, Computer Music, and Experiential Media. Recommended secondary focus areas include Computation, Electronics & Fabrication, Visual Art, and Audio/Visual Production. - Re-name and/or re-number MTEC courses to better describe content and facilitate better sequencing of learning material. This includes a re-vamp of prerequisite chains. - New course: MTEC 3200 "Special Topics in Emerging Media Technology." - New course: ENT 3470 "Mixing and Mastering." This course will be open to students in both programs in the department. - New course: MTEC 3380 "Body Controlled Media."
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).	Since the recent completion of our ten-year self-study, we have been preparing to re-scaffold and de-silo our program to better prepare our students for each step in the sequence of major courses and for employment or graduate school. This phase of our curriculum change represents the bulk of that work with respect to courses provided by the department.

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 phase two of a broad two-phase curriculum change broken into two proposals. Phase one proposal passed College Council Curriculum Committee in spring 2023. See Detailed Rationale for documentation.

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	X
• Date of department meeting approving the modification	X
• Chair's Signature	X
• Dean's Signature	X
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.	N/A
Documentation of Advisory Commission views (if applicable).	N/A
Completed Chancellor's Report Form.	X

EXISTING PROGRAM MODIFICATION PROPOSALS

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

Detailed Rationale

This proposal represents phase two of a larger two-phase curriculum change. Phase one was submitted in fall 2022 and passed College Council Curriculum Committee in spring 2023. Phase one changes will be implemented in spring 2024.

Complete phase one proposal:
https://openlab.citytech.cuny.edu/collegecouncil/files/2023/03/22-02_MajorProposal_EMT-Update-P1_2023_0303-R4.pdf

Phase one final report:
https://openlab.citytech.cuny.edu/collegecouncil/files/2023/03/22-02-FinalReport.pdf

Primary phase one objectives are summarized below.

Phase One Objectives in Brief

Phase one was concerned with (1) unifying math, science, and computer programming requirements for all students, regardless of concentration or focus, and (2) improving instruction related to career and professional objectives.

In phase one, we streamlined introductory courses in computer programming, winnowing four programming courses – two offered in-department, two offered by CST – down to a sequence of two: MTEC 1201 "Computer Programming for Interactive Media I" and MTEC 1202 "Computer Programming for Interactive Media II." We required all students to take at MAT 1375 or higher, PHYS 1433 or higher, and MAT 2440; previously, these were only required of students in the Media Computation concentration. We introduced MTEC 3501 "Culmination Project Development," doubling the number of courses devoted to helping students produce a culmination project suitable for use as a portfolio item for graduate school or job applications. Finally, we established MTEC 4502 "Career and Portfolio Seminar" to provide students with guidance on how to effectively present their work.

Phase Two Objectives

Since the recent completion of our ten-year self-study, we have been preparing to de-silo and re-scaffold our program to better prepare our students for each step in the sequence of major courses and for future employment or graduate school.

Pending approval of this proposal, students will take five courses (fifteen credits) across three primary focus areas, including "Game Development," "Computer Music," and "Experiential Media." Students are free to take Degree Electives from any courses available through the college, optimally chosen in consultation with a faculty advisor, but we recommend that they fill the requirement with additional courses from the primary focus areas or with courses from optional secondary focus areas, including "Visual Arts," "Audio/Visual Production," "Electronics & Fabrication," and "Computation." Students interested in Computation will have a path to the math department minor in computer science. Currently, students must formally declare a concentration in one of "Game Design and Interactive Media," "Media Computation," "Physical Computing," or "Music Technology."

Re-organizing our program to have students take courses from at least three focus areas, as opposed to having students "siloed" in a single concentration, allows the students more exposure to a variety of important skills in the field. Since students also have some control over the number of courses taken per focus area, the result is a more tightly curated yet flexible curriculum that provides options for specialization as well as a generalist path. Furthermore, students will no longer be required to formally declare a concentration prior to having certain courses count towards their degree progress, which will reduce some clerical overhead for students, faculty, and administrators.

Beyond de-siloing the program, a certain amount of "re-scaffolding" has been necessary. Here, re-scaffolding means changing course numbers and prerequisites to adjust the overall sequencing of courses in the major. We have also taken the opportunity to modify course titles and descriptions, where necessary, to more accurately reflect what is being taught.

In general, the re-scaffolding outlined in this proposal ensures that MTEC students who take any advanced course (3000-level or higher) in the major have completed at least one 2000-level major course, and that completion of any 2000-level major course means that students have also completed our two-course design sequence – MTEC 1101 and 1102, "Design Foundations I and II" (currently titled "Emerging Media Foundations" and "Production Practices") – and our new two-course computer programming sequence, MTEC 1201 and 1202, "Computer Programming for Interactive Media I and II." Currently, students can register for some courses without having taken all of the required fundamentals in design and programming. This results in unnecessary re-teaching of concepts across the curriculum.

Finally, our Phase Two program change introduces three new courses:

(1) MTEC 3200 "Special Topics in Emerging Media Technology" is an advanced course with open content designed to nimbly address new developments in technology, or specializations of the faculty that aren't addressed fully in other areas of the curriculum, without the delay of a curriculum change. The topic will change from semester to semester. MTEC students must take this course twice. Prerequisites include all 2000-level major courses.
(2) MTEC 3380 "Body Controlled Media" introduces a much-needed course tying together elements of many focus areas within the program while also providing students with exposure to advanced concepts in physical computing. As with MTEC 3200, prerequisites include all 2000-level major courses. This course is proposed as one of four under the "Experiential Media" primary focus area.
(3) ENT 3470 "Mixing and Mastering" is a course providing instruction in audio post-production. Both students in the MTEC Music Technology concentration (which will become the Computer Music focus pending approval of this proposal) and students in the sound module in ENT have been asking for such a course. Sound in ENT has historically focused mostly on live sound applications, and Music Technology in MTEC is focused on real-time interactive sound and audio synthesis. We therefore have a curricular hole in the form of audio post-production that this course will fill. ENT 2370 "Sound Technology II" – the proposed ENT student prerequisite for this course – addresses this topic to some extent, but course material is split between recording techniques and mixing, and does not include mastering. MTEC students take MTEC 2240 "Computer Music" as a prerequisite. This course is proposed as one of four under the "Computer Music" primary focus area.

NOTE: as a result of the change from concentrations to focus areas, language in our program learning outcomes has been updated, from

1. Attain mastery of one of the following four areas of concentration of the major: Game Design and Interactive Media, Media Computation, Music Technology, or Physical Computing.
2. Complete a technical production portfolio in a concentration area.
3. Attain proficiency in multiple computational, design, and media technologies.
4. Attain proficiency in cooperative design and collaborative production.
5. Attain proficiency in production management.

to

1. Attain mastery over elements of one or more of the primary focus areas of the major.
2. Complete a portfolio of work suitable for use in job or graduate school applications.
3. Attain proficiency in multiple computational, design, and media technologies.
4. Attain proficiency in cooperative design and collaborative production.
5. Attain proficiency in project management.

Phase Two Overview

MTEC PROGRAM CHANGE PHASE TWO		
Green indicates courses carried over from the current curriculum and the recently passed Phase I program changes to be implemented spring 2024.		
Orange indicates courses that have been added or have a name or course number change in this proposal.		
course category or code	**course title**	**course credits**
GENERAL EDUCATION REQUIRED AND FLEXIBLE COMMON CORE		
English Composition	ENG 1101 "English Composition I"	3
English Composition	ENG 1121 "English Composition II"	3
Mathematical and Quantitative Reasoning	MAT 1275 "College Algebra and Trigonometry" **(if the student has not placed out)**	4
Life and Physical Sciences	PHYS 1433 "General Physics I: Algebra Based" (WI)	4
WCGI (World Cultures and Global Issues)	choose any	3
USED (US Experience in its Diversity)	choose any	3
IS (Individual and Society)	choose any	3
CE (Creative Expression)	choose any	3
SW (Scientific World)	MAT 1375 "Pre-Calculus"	4
Add. Flex Core	MAT 2440 "Discrete Structures and Algorithms" (WI) - **not required as SW, required for the major; may do "double duty" as an SW course**	3
COM 1330	Public Speaking	3

ID (Interdisciplinary Course)	choose any	3
LibArt. WL	Liberal Arts Electives (2 courses) *OR* World Language Sequence (2 courses)	6
TOTAL LIBERAL ARTS CREDITS:		**45**
MTEC MAJOR COURSES TAKEN BY ALL STUDENTS		
MTEC 1000	Topics and Perspectives in Emerging Media Technology (WI)	3
MTEC 1101	Design Foundations I	3
MTEC 1102	Design Foundations II	3
MTEC 1201	Computer Programming for Interactive Media I	3
MTEC 1202	Computer Programming for Interactive Media II	3
MTEC 2210	Game Development	3
MTEC 2240	Computer Music	3
MTEC 2250	Digital Fabrication	3
MTEC 2280	Physical Computing	3
ENT 3106	Technical Production (take twice)	3 x 2
MTEC 3200 **(NEW COURSE)**	Special Topics in Emerging Media Technology (take twice, different topics)	3 x 2
MTEC 3501	Culmination Project Development (WI)	3
ENT 4501	Culmination Project	3
MTEC 4502	Career and Portfolio Seminar	3
TOTAL CORE MAJOR COURSE CREDITS:		**48**

MTEC MAJOR PRIMARY FOCUS AREAS – Take 5 courses from at least 2 areas.		
Game Development Focus		
MTEC 2101	Introduction to Game Design	3
MTEC 3230	Mixed Reality for Immersive Worlds	3
MTEC 3150	Intermediate Game Development	3
MTEC 3250	Asset Development for Games	3
MTEC 4250	Rapid Prototyping for Game Development	3
Computer Music Focus		
MTEC 3240	Advanced Computer Music	3
ENT 3390	Sound for Multimedia	3
MTEC 3430	Computational Creativity in Music	3
ENT 3470 **(NEW COURSE)**	Mixing and Mastering	3
Experiential Media Focus		
MTEC 3380 **(NEW COURSE)**	Body Controlled Media	3
MTEC 3125	Non-linear Narrative	3
MTEC 3160	Performance Design	3
ENT 4480	Show Systems Integration	3
MTEC 3280	Emerging Interfaces	3
TOTAL PRIMARY FOCUS CREDITS:		**15**

MTEC MAJOR DEGREE ELECTIVES – Take courses as needed to reach 120 credits. Students may wish to take additional courses from primary focus areas or from secondary focus areas of interest.		
MTEC MAJOR SECONDARY FOCUS AREAS		
Visual Art		
COMD 3420	Storytelling for Creatives	3
COMD 3540	Two-Dimensional Animation and Modelling	3
COMD 3640	Three-Dimensional Animation and Modeling I	3
COMD 3740	Three-Dimensional Animation and Modeling II	3
Audio/Visual Production		
ENT 1190	Video Technology	3
ENT 3190	Video Editing Skills	3
ENT 1270	Sound Technology I	3
ENT 2370	Sound Technology II	3
ENT 4470	Sound Design	3
ENT 1250	Lighting Technology	3
Electronics & Fabrication		
CET 1111*	Logic and Problem-Solving	3
CET 1150	Electrical Circuits	3
CET 1250	Fundamentals of Digital Systems	4
CET 2350	Electronics	4

ENT 1204	Basic Electricity for Live Entertainment	2
ENT 2140	Basic Welding	3
ENT 3200	Introduction to Scene Design	3
ENT 3310	Monster Shop	3
Computation		
CET 1111*	Logic and Problem-Solving	3
CST 1204*	Database System Fundamentals	3
MAT 1630*	Intro to Computational Science	3
MAT 2540*	Discrete Structures and Alogrithms II	3
CST 2309	Web Programming I	3
CST 2403	Introductory C++ Programming Language Part I	3
CST 3503	C++ Programming Part II	
TOTAL DEGREE ELECTIVE CREDITS:		**12**
OVERALL PROGRAM TOTAL:		**120**

*Denotes a course that can be used towards MAT Department Minor in Computer Science.

Phase Two Degree Checklist

MTEC PROGRAM DEGREE CHECKLIST, POST-PHASE-TWO CHANGES				
SEMESTER 1		**Gen Ed**	**Degree**	**Total Credits**
ENG 1101	English Composition I	3		
MQR - MAT 1275	College Algebra and Trig	4		

MTEC 1000	Topics and Perspectives in Emerging Media Technology		3	
MTEC 1101	Design Foundations I		3	
MTEC 1201	Computer Programming for Interactive Media I		3	
	Semester 1 Total Credits:	**7**	**9**	**16**
SEMESTER 2		**Gen Ed**	**Degree**	**Total Credits**
SW - MAT 1375	Precalculus	4		
ENG 1121	English Composition II	3		
IS	Individual and Society	3		
MTEC 1102	Design Foundations II		3	
MTEC 1202	Computer Programming for Interactive Media II		3	
	Semester 2 Total Credits:	**10**	**6**	**16**
SEMESTER 3		**Gen Ed**	**Degree**	**Total Credits**
Primary Focus, 1 of 5			3	
LPS - PHYS 1433	General Physics I, Algebra Based, or higher (WI)	4		
MTEC 2210	Game Development		3	
MTEC 2240	Computer Music		3	
Addtl. Flex - MAT 2440	Discrete Structures and Algorithms	3		
	Semester 3 Total Credits:	**7**	**9**	**16**
SEMESTER 4		**Gen Ed**	**Degree**	**Total Credits**
Primary Focus, 2 of 5			3	
CE	Creative Expressions Course	3		
MTEC 2250	Digital Fabrication		3	
MTEC 2280	Physical Computing		3	
Degree Elective 1 of 4			3	
	Semester 4 Total Credits:	**3**	**12**	**15**

SEMESTER 5		**Gen Ed**	**Degree**	**Total Credits**
WCGI	World Cultures and Global Issues Course	3		
ID	Interdisciplinary Course	3		
ENT 3106, 1 of 2	Technical Production		3	
MTEC 3200, 1 of 2	Special Topics in Emerging Media Technology		3	
Primary Focus, 3 of 5			3	
	Semester 5 Total Credits:	**6**	**9**	**15**
SEMESTER 6		**Gen Ed**	**Degree**	**Total Credits**
LibArt/WL, 1 of 2	Liberal Arts Elective	3		
COM 1330	Speech / Oral Communication: Public Speaking	3		
Primary Focus, 4 of 5			3	
ENT 3106, 2 of 2	Technical Production		3	
Degree Elective, 2 of 4			3	
	Semester 6 Total Credits:	**6**	**9**	**15**
SEMESTER 7		**Gen Ed**	**Degree**	**Total Credits**
Degree Elective, 3 of 4			3	
USED	U.S Experiences in Its Diversity	3		
Primary Focus, 5 of 5			3	
Degree Elective, 4 of 4			3	
MTEC 3501	Culmination Project Development		3	
	Semester 7 Total Credits:	**3**	**12**	**15**
SEMESTER 8		**Gen Ed**	**Degree**	**Total Credits**
ENT 4501	Culmination Project		3	
MTEC 4502	Career and Portfolio Seminar		3	
LibArt/WL, 2 of 2	Liberal Arts Elective	3		

MTEC 3200, 2 of 2	Special Topics in Emerging Media Technology		3	
	Semester 8 Total Credits:	**3**	**9**	**12**
		Final Gen Ed	**Final Degree**	**Final Total**
		45	**75**	**120**

Section AIII: Changes in MTEC Degree Program

Effective Date: Spring 2025

FROM:			TO:		
GENERAL EDUCATION CORE (44 credits)			**GENERAL EDUCATION CORE (44 credits)**		
Required Core (14 credits)			**Required Core (14 credits)[1]**		
ENG 1101	English Composition I	3	ENG 1101	English Composition I	3
ENG 1121	English Composition II	3	ENG 1121	English Composition II	3
MAT 1375	Precalculus, or higher	4	MAT 1375	Precalculus, or higher	4
PHYS 1433	General Physics I: Algebra Based, or higher (WI)	4	PHYS 1433	General Physics I: Algebra Based, or higher (WI)	4
Flexible Core (6 courses, ~18 credits)			**Flexible Core (6 courses, ~18 credits)**		
World Cultures and Global Issues			World Cultures and Global Issues		
Any available course			Any available course		
US Experience in its Diversity			US Experience in its Diversity		
Any available course			Any available course		
Individual and Society			Individual and Society		
Any available course			Any available course		
Creative Expression			Creative Expression		
Any available course			Any available course		
Scientific World			Scientific World		
Any available course[6]			Any available course[6]		
Additional Flexible Common Core Course			Additional Flexible Common Core Course		
Any available course[4]			Any available course[4]		
College Option (12 credits minimum)			**College Option (12 credits minimum)**		
One course in Speech/Oral Communication			One course in Speech/Oral Communication		
COM1330	Public Speaking or higher	3	COM1330	Public Speaking or higher	3
One interdisciplinary Liberal Arts and Sciences course:			One interdisciplinary Liberal Arts and Sciences course:		

Any available course		3

Two additional liberal arts courses to reach a minimum total of 42 credits in general education. In meeting their general education requirements overall, students must take at least one advanced liberal arts course or two sequential courses in a foreign language. 6

Writing Intensive Requirement
Students at New York City College of Technology must complete two courses designated WI for the associate level, one from GenEd and one from the major; and two additional courses designated WI for the baccalaureate level, one from GenEd and one from the major.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS (76 credits)

Program-Specific Foundational Courses (29 credits)

~~MTEC 1001~~	~~Game Design and Interactive Media Skills Lab~~	~~1~~
~~MTEC 1005~~	~~Physical Computing Skills Lab~~	~~1~~
~~MTEC 1101~~	~~Emerging Media Foundation~~	~~3~~
~~MTEC 1102~~	~~Production Practices~~	~~3~~
MTEC 1201	Computer Programming for Interactive Media I	3
MTEC 1202	Computer Programming for Interactive Media II	3
~~MTEC 2210~~	~~Game Design and Interactive Media~~	~~3~~
~~MTEC 2120~~	~~Interactive Media Systems Design~~	~~3~~
~~MTEC 2250~~	~~Fabrication for Physical Computing~~	~~3~~
~~MTEC 2280~~	~~Ins and Outs~~	~~3~~
MAT 2440	Discrete Structures and Algorithms I (WI)	3

Program-Specific Advanced Courses (18 credits)

~~MTEC 3140~~	~~Topics and Perspectives in Emerging Technologies (WI)~~	~~3~~
ENT 3106	Technical Production (3 credits, take 2 times)	6
MTEC 3501	Culmination Project Development (WI)	3
ENT 4501	Culmination Project	3
MTEC 4502	Career and Portfolio Seminar	3

Any available course		3

Two additional liberal arts courses to reach a minimum total of 42 credits in general education. In meeting their general education requirements overall, students must take at least one advanced liberal arts course or two sequential courses in a foreign language. 6

Writing Intensive Requirement
Students at New York City College of Technology must complete two courses designated WI for the associate level, one from GenEd and one from the major; and two additional courses designated WI for the baccalaureate level, one from GenEd and one from the major.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS (76 credits)

Program-Specific Foundational Courses (30 credits)

MTEC 1000	Topics and Perspectives in Emerging Technologies (WI)	3
		0
		0
MTEC 1101	Design Foundations I	3
MTEC 1102	Design Foundations II	3
MTEC 1201	Computer Programming for Interactive Media I	3
MTEC 1202	Computer Programming for Interactive Media II	3
MTEC 2210	Game Development	3
		0
MTEC 2240	Computer Music	3
MTEC 2250	Digital Fabrication	3
MTEC 2280	Physical Computing	3
MAT 2440*	Discrete Structures and Algorithms I (WI)	3[1]

Program-Specific Advanced Courses (21 credits)

		0
ENT 3106	Technical Production (3 credits, take 2 times)	6
MTEC 3200	Special Topics in Emerging Media Technology (3 credits, take 2 times)	6
MTEC 3501	Culmination Project Development (WI)	3
ENT 4501	Culmination Project	3
MTEC 4502	Career and Portfolio Seminar	3

~~**Program-Specific Concentration Courses (take 5 courses for ~15 credits)**~~			**Program-Specific Primary Focus Courses** (take 5 courses from at least 2 areas)		
~~Music Technology Concentration~~			PRIMARY FOCUS AREAS		
~~ENT 1270~~	~~Sound Technology I~~	~~3~~	Game Development Focus		
~~ENT 2370~~	~~Sound Technology II~~	~~3~~	MTEC 2101	Introduction to Game Design	3
~~MTEC 2240~~	~~Music Technology~~	~~3~~	MTEC 3150	Intermediate Game Development	3
~~MTEC 2260~~	~~Music Synthesis and Sampling~~	~~3~~	MTEC 3250	Asset Development for Games	3
~~ENT 4470~~	~~Sound Design~~	~~3~~	MTEC 4250	Rapid Prototyping for Game Development	3
~~Game Design and Interactive Media Concentration~~			Computer Music Focus		
~~MTEC 2101~~	~~Introduction to Game Design Concepts~~	~~3~~	ENT 3390	Sound for Multimedia	3
~~COMD 3540~~	~~2-Dimensional Animation~~	~~2~~	ENT 3470	Mixing and Mastering	3
~~COMD 3640~~	~~3-Dimensional Animation and Modeling I~~	~~3~~	MTEC 3260	Advanced Computer Music	3
~~COMD 3740~~	~~3-Dimensional Animation and Modeling II~~	~~3~~	MTEC 3430	Computational Creativity in Music	3
~~COMD 4720~~	~~Multimedia Design I~~	~~3~~	Experiential Media Focus		
~~ARCH 3550~~	~~Building Performance Workshop~~	~~3~~	ENT 4480	Show Systems Integration	3
~~ARCH 3551~~	~~Sustainability: History and Practice~~	~~3~~	MTEC 3125	Non-linear Narrative	3
~~——~~			MTEC 3280	Emerging Interfaces	3
~~ENT 1190~~	~~Video Technology~~	~~3~~	MTEC 3380	Body Controlled Media	3
~~OR~~					
~~COMD 2320~~	~~Introduction to Video~~	~~3~~			
~~----~~					
~~ENT 1250~~	~~Lighting Technology~~	~~3~~			
~~ENT 1270~~	~~Sound Technology I~~	~~3~~			
~~ENT 3390~~	~~Sound for Multimedia~~	~~3~~			
~~IND 2313~~	~~Industrial Design I (Fall only)~~	~~2~~			
~~MTEC 3125~~	~~Nonlinear Narrative~~	~~3~~			
~~MTEC 3160~~	~~Performance Design~~	~~3~~			
~~MTEC 3175~~	~~Experimental Game Design and Development~~	~~3~~			
~~MTEC 3230~~	~~Mixed Reality for Immersive Worlds~~	~~3~~			
~~MTEC 3240~~	~~Data Sonification and Visualization~~	~~3~~			
~~Media Computation Concentration~~					
~~CST 1204~~	~~Database System Fundamentals~~	~~3~~			
~~CST 1215~~	~~Operating System Fundamentals~~	~~3~~			
~~CST 2301~~	~~Multimedia and Mobile Device Programming~~	~~3~~			
~~CST 2309~~	~~Web Programming I~~	~~3~~			
~~CST 2403~~	~~C++ Programming Language Part I~~	~~3~~			
~~MAT 1475~~	~~Calculus~~	~~4~~			
~~MECH 3550~~	~~Simulation and Visualization~~	~~3~~			
~~MTEC 2101~~	~~Introduction to Game Design Concepts~~	~~3~~			
~~MTEC 3125~~	~~Nonlinear Narrative~~	~~3~~			

~~MTEC 3175~~	~~Experimental Game Design and Development~~	~~3~~
~~MTEC 3230~~	~~Mixed Reality for Immersive Worlds~~	~~3~~
~~MTEC 3240~~	~~Data Sonification and Visualization~~	~~3~~
~~MTEC 4030~~	~~Computational Creativity~~	~~3~~
~~Physical Computing Concentration~~		
~~CST 2403~~	~~C++ Programming Language Part I~~	~~3[6]~~
~~CET 3512~~	~~Microcomputer Systems Technology~~	~~4~~
~~CET 3640~~	~~Software for Computer Control~~	~~3~~
~~CET 4952~~	~~Robotics Technology~~	~~4~~
~~EMT 1150~~	~~Electrical Circuits~~	~~5~~
~~EMT 1250~~	~~Fundamentals of Digital Systems~~	~~4~~
~~ENT 1108~~	~~Entertainment Drafting I~~	~~3~~
~~ENT 2280~~	~~Introduction to Show Networking~~	~~3~~
~~ENT 4480~~	~~Show Control~~	~~3~~
~~ETN 1102~~	~~Principles of Electricity and Electronics (for non-ET/TC majors)~~	~~4~~
~~ETN 1302~~	~~Principles of Electricity, Electronics, and Computer Operation (for non-ET/TC majors)~~	~~4~~
~~IND 2304~~	~~Advanced Solids Modeling~~	~~2~~
~~MAT 2580~~	~~Introduction to Linear Algebra~~	~~4~~
~~MECH 1222~~	~~Computer-Aided Engineering Graphics~~	~~2~~
~~MECH 1234~~	~~Statics and Strength of Materials~~	~~3~~
~~MTEC 3280~~	~~Embedded Systems for Physical Computing~~	~~3~~

Program Specific Elective Courses (take as needed to reach 120 credits)
~~Take any courses in MTEC or ENT or any concentration-specific course from another department that isn't a program requirement.~~

Program Specific Elective Courses (take as needed to reach 120 credits)
Students may wish to take additional courses from primary focus areas or from secondary focus areas of interest.

SECONDARY FOCUS AREAS

Visual Art		
COMD 3420	Storytelling for Creatives	3
COMD 3540	Two-Dimensional Animation and Modelling	3
COMD 3640	Three-Dimensional Animation and Modeling I	3
COMD 3740	Three-Dimensional Animation and Modeling II	3
Audio/Visual Production		
ENT 1190	Video Technology	3
ENT 3190	Video Editing Skills	3
ENT 1270	Sound Technology I	3
ENT 2370	Sound Technology II	3

Program-Specific Liberal Arts and Sciences Requirements

MAT 1375	Precalculus, or higher	Met as GenEd
PHYS 1433	General Physics I: Algebra Based, or higher	Met as GenEd

Total program-specific required course credits	**76**
Minimum required liberal arts and sciences credits	**44**
TOTAL CREDITS REQUIRED FOR THE DEGREE	**120**

ENT 4470	Sound Design	3
ENT 1250	Lighting Technology	3
Electronics & Fabrication		
CET 1111*	Logic and Problem-Solving	3
CET 1150	Electrical Circuits	3
CET 1250	Fundamentals of Digital Systems	4
CET 2350	Electronics	4
ENT 1204	Basic Electricity for Live Entertainment	2
ENT 2140	Basic Welding	2
ENT 3200	Introduction to Scene Design	3
ENT 3310	Monster Shop	2
Computation		
CET 1111*	Logic and Problem-Solving	3
CST 1204*	Database System Fundamentals	3[1]
MAT 1630*	Intro to Computational Science	3
MAT 2540*	Discrete Structures and Algorithms II	3
CST 2309	Web Programming I	3[1]
CST 2403	Introductory C++ Programming Language Part I	3[1]
CST 3503	C++ Programming Part II	3

*fulfills a Computer Science Minor (MAT Department) requirement

Example path to computer science minor:

course	**taken as**
MAT 2440, 1 of 3 required minor courses	MTEC degree requirement
MAT 2540, 2 of 3 required minor courses	Additional liberal arts
MAT 1475, prerequisite for MAT 1630	Additional liberal arts
MAT 1630, 3 of 3 required minor courses	Degree elective
CET 1111, 1 of 2 elective minor courses	Degree elective
CST 1101, prerequisite for CST 1204	Degree elective
CST 1204, 2 of 2 elective minor courses	Degree elective

Program-Specific Liberal Arts and Sciences Requirements

MAT 1375	Precalculus, or higher	Met as GenEd
PHYS 1433	General Physics I: Algebra Based, or higher	Met as GenEd

Total program-specific required course credits	**76**
Minimum required liberal arts and sciences credits	**44**
TOTAL CREDITS REQUIRED FOR THE DEGREE	**120**

[1]During phase one of our overarching curriculum change, which passed in spring of 2023, the math department supported MTEC 1202 as a prerequisite for MAT 2440 in lieu of CST 1201 (see attached letter). Since MTEC 1202 is now part of the college curriculum, we have requested that the prerequisite change be formalized.

[2]During phase one of our overarching curriculum change, which passed in spring of 2023, the CST department supported the establishment of MTEC 1201 and MTEC 1202 as replacements in the MTEC core curriculum for CST 1101 and CST 1201 (see attached letter). Since both new courses are now part of the college curriculum, we have requested that the CST department consider MTEC 1201 and MTEC 1202 as substitute prerequisites for CST 1204, CST 2309, and CST 2403, where applicable. CST 1204, CST 2309, and CST 2403 are all retained in this program change as part of the secondary focus in computation.

Rationale

Goals of the Emerging Media Technology program phase two modification:

- Re-organizing our program to have students take courses from at least two focus areas, as opposed to a single concentration, allows our students more exposure to a variety of important skills in the field. Students, however, still have some choice with respect to the number of courses taken per focus area. The result is a more tightly curated yet flexible curriculum that provides options for specialization as well as a generalist path.
- Many courses were re-named and/or re-numbered to better describe the content delivered and to fix course sequencing issues.
- Special Topics in Emerging Media Technology course provides a loosely defined curricular “bucket” that can be leveraged to rapidly address new developments in the field and to take advantage of full- and part-time faculty specializations and research interests.
- Body Controlled Media introduces a much-needed course tying together elements of many focus areas within the program while also providing students with exposure to advanced concepts in physical computing.
- Mixing and Mastering fills an audio post-production hole in our curriculum.

Section AIV: New Courses

MTEC 3200 Special Topics in Emerging Media Technology

Department(s)	Emerging Media Technology Program, Entertainment Technology department
Academic Level	**[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial**
Subject Area	Emerging Media Technology
Course Prefix	MTEC
Course Number	3200
Course Title	Special Topics in Emerging Media Technology
Catalog Description	This course presents students with specialized topics related to the field of Emerging Media Technology not otherwise covered in detail elsewhere in the curriculum. The course may address a new development in the field or a specialization or research interest of the faculty. The content of this course varies over time. Students must take the course twice, but cannot take two Special Topics courses that cover that same material. 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.
Prerequisite	MTEC 2210 Introduction to Game Development, MTEC 2240 Introduction to Computer Music, MTEC 2250 Introduction to Fabrication, MTEC 2280 Introduction to Physical Computing
Corequisite	
Pre- or corequisite	
Credits	3
Contact Hours	2 classroom hours and 2 lab hours
Liberal Arts	**[ ] Yes [X] No**
Course Attribute (e.g. Writing Intensive, etc)	
Course Applicability	**[X] Major** **[ ] Gen Ed Required** **[ ] Gen Ed - Flexible** **[ ] Gen Ed - College Option** **[ ] English Composition** **[ ] World Cultures** **[ ] Speech** **[ ] Mathematics** **[ ] US Experience in its Diversity** **[ ] Interdisciplinary** **[ ] Science** **[ ] Creative Expression** **[ ] Advanced Liberal Arts** **[ ] Individual and Society** **[ ] Scientific World**
Effective Term	Spring 2025

Rationale: This course provides a loosely defined curricular "bucket" that can be leveraged to rapidly address new developments in the field and to take advantage of full- and part-time faculty specializations and research interests.

MTEC 3380 Body Controlled Media

Department(s)	Emerging Media Technology Program, Entertainment Technology department
Academic Level	**[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial**
Subject Area	Emerging Media Technology
Course Prefix	MTEC
Course Number	3380

Course Title	Body Controlled Media
Catalog Description	Control a story with voice commands. Trigger a song with a smile. Navigate a game with dance moves. This course focuses on interactive media controlled solely through body movement. Students explore interaction through touchless interfaces such as physical presence, motion, gesture, voice, and body position. Utilizing a range of tools, from basic sensors to computer vision algorithms powered by AI, the course asks how body-centered interfaces transform our experience of the world around us. 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.
Prerequisite	MTEC 2210 Introduction to Game Development, MTEC 2240 Introduction to Computer Music, MTEC 2250 Introduction to Fabrication, MTEC 2280 Introduction to Physical Computing
Corequisite	
Pre- or corequisite	
Credits	3
Contact Hours	2 classroom hours and 2 lab hours
Liberal Arts	**[ ] Yes [X] No**
Course Attribute (e.g. Writing Intensive, etc)	
Course Applicability	**[X] Major** **[ ] Gen Ed Required** / **[ ] Gen Ed - Flexible** / **[ ] Gen Ed - College Option** **[ ] English Composition** / **[ ] World Cultures** / **[ ] Speech** **[ ] Mathematics** / **[ ] US Experience in its Diversity** / **[ ] Interdisciplinary** **[ ] Science** / **[ ] Creative Expression** / **[ ] Advanced Liberal Arts** **[ ] Individual and Society** **[ ] Scientific World**
Effective Term	Spring 2025

Rationale: Body Controlled Media introduces a much-needed course tying together elements of many focus areas within the program while also providing students with exposure to advanced concepts in physical computing.

MTEC 3470 Mixing and Mastering

Department(s)	Emerging Media Technology Program, Entertainment Technology department
Academic Level	**[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial**
Subject Area	Emerging Media Technology
Course Prefix	MTEC
Course Number	3470
Course Title	Mixing and Mastering
Catalog Description	Fundamentals of post-production audio mixing and mastering. For hybrid and online sections, minimum technology requirements are a working camera, microphone, and headphones. Students are to switch cameras and mics on at the instructor's request.
Prerequisite	MTEC 2240 or ENT 2370
Corequisite	
Pre- or corequisite	
Credits	3
Contact Hours	2 classroom hours and 2 lab hours
Liberal Arts	**[ ] Yes [X] No**
Course Attribute (e.g. Writing Intensive, etc)	
Course Applicability	**[X] Major** **[ ] Gen Ed Required** / **[ ] Gen Ed - Flexible** / **[ ] Gen Ed - College Option** **[ ] English Composition** / **[ ] World Cultures** / **[ ] Speech** **[ ] Mathematics** / **[ ] US Experience in its Diversity** / **[ ] Interdisciplinary** **[ ] Science** / **[ ] Creative Expression** / **[ ] Advanced Liberal Arts** **[ ] Individual and Society** **[ ] Scientific World**
Effective Term	Spring 2025

Rationale: This course fills an audio post-production hole in the MTEC and ENT curricula.

Section AV: Changes to Existing Courses

ENT 1190 Video Technology

CUNYFirst Course ID			
Course Number and Title	ENT 1190 Video Technology		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title		**Course Title**	
Prerequisite		**Prerequisite**	
Corequisite		**Corequisite**	
Pre- or corequisite	~~ENT 1204~~	**Pre- or corequisite**	ENT 1204 or MTEC 2280
Hours		**Hours**	
Credits		**Credits**	
Description		**Description**	
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: Prerequisite change adds a path for MTEC students.

ENT 1250 Lighting Technology

CUNYFirst Course ID			
Course Number and Title	ENT 1250 Lighting Technology		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title		**Course Title**	

Prerequisite		**Prerequisite**	
Corequisite		**Corequisite**	
Pre- or corequisite	~~ENT 1204~~	**Pre- or corequisite**	ENT 1204 or MTEC 2280
Hours		**Hours**	
Credits		**Credits**	
Description		**Description**	
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: Prerequisite change adds a path for MTEC students.

ENT 1270 Sound Technology I

CUNYFirst Course ID			
Course Number and Title	ENT 1270 Sound Technology I		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title		**Course Title**	

Prerequisite		**Prerequisite**	
Corequisite		**Corequisite**	
Pre- or corequisite	~~ENT 1204~~	**Pre- or corequisite**	ENT 1204 or MTEC 2280
Hours		**Hours**	
Credits		**Credits**	
Description		**Description**	
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: Prerequisite change adds a path for MTEC students.

ENT 2140 Basic Welding

CUNYFirst Course ID			
Course Number and Title	ENT 2140 Basic Welding		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title		**Course Title**	

Prerequisite	~~ENT 1110~~	**Prerequisite**	ENT 1110 or MTEC 2250
Corequisite		**Corequisite**	
Pre- or corequisite		**Pre- or corequisite**	
Hours		**Hours**	
Credits		**Credits**	
Description		**Description**	
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: Prerequisite change adds a path for MTEC students.

ENT 3106 Technical Production

CUNYFirst Course ID			
Course Number and Title	ENT 3106 Technical Production		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title		**Course Title**	

Prerequisite	~~ENT 1106 or Department Permission~~	**Prerequisite**	For ENT students, ENT 1106 or department permission. For MTEC students, MTEC 2210, MTEC 2240, MTEC 2250, MTEC 2280
Corequisite		**Corequisite**	
Pre- or corequisite	~~ENT 1110 or ENT 1190 or ENT 1250 or ENT 1270~~	**Pre- or corequisite**	For ENT students, ENT 1110 or ENT 1190 or ENT 1250 or ENT 1270. For MTEC students, none
Hours		**Hours**	
Credits		**Credits**	
Description		**Description**	
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: Sections of ENT 3106 for MTEC students require skills learned in the 2000-level MTEC major courses.

ENT 3200 Introduction to Scene Design

CUNYFirst Course ID			
Course Number and Title	ENT 3200 Introduction to Scene Design		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title		**Course Title**	

Prerequisite	~~ENT 1108, and (ENG 1101 or ENG 1101CO or ENG 1101ML)~~	**Prerequisite**	ENT 1108 or MTEC 2250 and (ENG 1101 or ENG 1101CO or ENG 1101ML)
Corequisite		**Corequisite**	
Pre- or corequisite		**Pre- or corequisite**	
Hours		**Hours**	
Credits		**Credits**	
Description		**Description**	
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: Prerequisite change adds a path for MTEC students.

ENT 3310 Monster Shop

CUNYFirst Course ID			
Course Number and Title	ENT 3310 Monster Shop		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title		**Course Title**	

Prerequisite	~~ENT 2140 AND ENT 2200. This course may be taken up to 4 times for a total of 8 credits~~	**Prerequisite**	For ENT students: ENT 2140 and ENT 2200; this course may be taken up to 4 times for a total of 8 credits. For MTEC students: MTEC 2250.
Corequisite		**Corequisite**	
Pre- or corequisite		**Pre- or corequisite**	
Hours		**Hours**	
Credits		**Credits**	
Description		**Description**	
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: Prerequisite change adds a path for MTEC students.

ENT 3390 Sound for Multimedia

CUNYFirst Course ID			
Course Number and Title	ENT 3390 Sound for Multimedia		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title		**Course Title**	
Prerequisite	~~COMD 3620 or COMD 4720 or ENT 1270 or MTEC 1102~~	**Prerequisite**	COMD 3620 or COMD 4720 or ENT 1270 or MTEC 2240
Corequisite		**Corequisite**	

Pre- or corequisite		**Pre- or corequisite**	
Hours		**Hours**	
Credits		**Credits**	
Description	~~Introduction to the use of sound in multimedia. Digital multitrack recording and editing is explored, with an emphasis on integration with visual components. Students develop techniques of recording and editing on industry-standard software and hardware systems. Digital audio formats, compression protocols, streaming audio, synchronization and integration with multimedia elements are covered. MIDI and basic sequencing as used in Internet-based playback systems. Importing and exporting audio protocols between a variety of applications. Students will work in an intensive, project oriented environment using a variety of applications on the Macintosh platform. It is recommended that AD students bring existing multimedia projects of their own creation to explore how to enhance with additional audio effects.~~	**Description**	Introduction to the use of sound in multimedia, including theatrical production, film, and video games. Basics of digital multitrack recording and editing are explored, with an emphasis on integration with visual components. Students develop original audio or music for incorporation with existing visual media. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: MTEC 2240, Introduction to Computer Music, provides better preparation for this course than MTEC 1102. MTEC 2240 includes MTEC in its list of pre- and co-requisites.

ENT 4480 Show Systems Integration

CUNYFirst Course ID			
Course Number and Title	ENT 4480 Show Systems Integration		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title		**Course Title**	
Prerequisite	~~ENT 2280, MTEC 1201~~	**Prerequisite**	ENT 2280 or MTEC 2280

Corequisite		**Corequisite**	
Pre- or corequisite		**Pre- or corequisite**	
Hours		**Hours**	
Credits		**Credits**	
Description		**Description**	
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	
Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: New prerequisite provides a path for interested MTEC students.

MTEC 1101 Emerging Media Foundation

CUNYFirst Course ID			
Course Number and Title	MTEC 1101 Emerging Media Foundation		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title	~~Emerging Media Foundation~~	**Course Title**	Design Foundations I
Prerequisite	~~none; Equivalent to old course number IMT 1101~~	**Prerequisite**	none
Corequisite		**Corequisite**	
Pre- or corequisite	~~MTEC 1201~~	**Pre- or corequisite**	none
Hours		**Hours**	
Credits		**Credits**	
Description	~~An introduction to interactive multimedia technology with a focus on interdisciplinary, project based, cooperative learning. Students will be immersed in the protocols and processes of the Interactive Media Technologies design process: idea development, presentation, prototyping and production, which will serve them in the face of rapid changes in technology. Students will explore basic theoretical and applied concepts of audio, visual, tactile and interaction design through creative group projects, visiting professionals and on-line documentation of their work.~~	**Description**	Design Foundations I serves as the initial course in a two-part series for Emerging Media Technology majors. Emphasizing project-based learning, this course equips students with fundamental concepts, skills, and design processes essential for creating digital and interactive media. Integrating creative methodologies with critical thinking, students prepare for a rapidly evolving technological landscape. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: Title change provides greater specificity regarding course content; IMT 1101 was offered so long ago that there are no students left in the corresponding cohorts.

MTEC 1102 Production Practices

CUNYFirst Course ID			
Course Number and Title	MTEC 1102 Production Practices		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title	~~Production Practices~~	**Course Title**	Design Foundations II
Prerequisite	MTEC 1101	**Prerequisite**	MTEC 1101
Corequisite		**Corequisite**	

Pre- or corequisite	~~MTEC 1201~~	**Pre- or corequisite**	none
Hours		**Hours**	
Credits		**Credits**	
Description	~~A hands-on introduction to the applied principles and production techniques used in interactive media development. Students will be introduced to the basic principles, practices and technology necessary for success in digital media courses including imaging, sound, video and animation, as well as, interactive, networked and physical computing technologies. The structure of this course emphasizes an integrated and creative approach to interactive media with detailed instruction and practice in the technical aspects of production that go hand-in-hand with critical academic thinking.~~	**Description**	Design Foundations II serves as the second course in a two-part series for Emerging Media Technology majors. Emphasizing project-based learning, this course equips students with fundamental concepts, skills, and design processes essential for creating digital and interactive media. Integrating creative methodologies with critical thinking, students prepare for a rapidly evolving technological landscape. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: MTEC 1102 mostly functions as a design theory and approaches course, hence the title change end elimination of programming pre- or co-requisite (MTEC 1201).

MTEC 2120 Interactive Media Systems Design

CUNYFirst Course ID			
Course Number and Title	MTEC 2120 Interactive Media Systems Design		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number	~~2120~~	**Course Number**	3150
Course Title	~~Interactive Media Systems Design~~	**Course Title**	Intermediate Game Development
Prerequisite	~~MTEC 1101~~	**Prerequisite**	MTEC 2210
Corequisite		**Corequisite**	

Pre- or corequisite	~~MTEC 1102, MTEC 1201~~	**Pre- or corequisite**	none
Hours		**Hours**	
Credits		**Credits**	
Description	~~A nontraditional approach to the articulation of design techniques with different types of interactive media and an introduction to the theories, models and frameworks for designing interaction with sound and screen. Students sketch and prototype systems for the management and delivery of future media through multimedia visual programming languages.~~	**Description**	A course focusing on specialized 3D game development processes and content creation. Students learn and practice, working with terrain and foliage tools, lighting 3D scenes and implementing various interactive systems to create rich player experiences. Students also experiment with environmental storytelling and world building, learning to communicate through space and level design. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: Title reflects shift to generalized game development (currently, this course is mostly taught through game development); the new MTEC 2210 prerequisite includes MTEC 1101, MTEC 1102, and MTEC 1201 its own pre- and co-requisites.

MTEC 2210 Game Design and Interactive Media

CUNYFirst Course ID			
Course Number and Title	MTEC 2210 Game Design and Interactive Media		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title	~~Game Design and Interactive Media~~	**Course Title**	Game Development
Prerequisite	~~MTEC 1102~~	**Prerequisite**	MTEC 1201, MTEC 1101
Corequisite		**Corequisite**	

Pre- or corequisite	~~none~~	**Pre- or corequisite**	MTEC 1102, MTEC 1202
Hours		**Hours**	
Credits		**Credits**	
Description	~~A cross-disciplinary foundation for the design of games and interactive multi-media technology for artists, engineers, scientists and technologists. Students learn human-centered design principles and apply these methodologies to collaborative team-based projects across web interactive, mobile, games, virtual & augmented reality, biomedia and environmental installation. Using case studies, brainstorming processes and rapid analog and digital prototyping, students learn design thinking and problem solving techniques to enhance usability, incorporate sensory experience, influence perception, increase appeal and make more effective interactive design decisions, and make better design decisions.~~	**Description**	A game development foundation class, focused on working in a game engine environment. Students learn the fundamentals of creating cross-platform 2D digital games and interactive experiences using object-oriented programming as well as a variety of other tools and techniques. The course adopts a hands-on approach, delving directly into guided project-based assignments that cover the essential first steps for creating a digital game. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: New pre- and co-requisites better prepare students with the programming skills needed to attempt this course.

MTEC 2240 Music Technology

CUNYFirst Course ID			
Course Number and Title	MTEC 2240 Music Technology		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title	~~Music Technology~~	**Course Title**	Computer Music
Prerequisite	~~ENT 1270~~	**Prerequisite**	MTEC 1201
Corequisite		**Corequisite**	

Pre- or corequisite	~~none~~	**Pre- or corequisite**	MTEC 1102 and MTEC 1202 for MTEC students and ENT 1270 for ENT students
Hours		**Hours**	
Credits		**Credits**	
Description	~~An introduction and overview of the basic techniques and components used in commercial electronic music production. Students work at individual workstations with a variety of software. Rudiments of music theory are covered. Introduction to synthesis, sequencing, sampling and loop-based composition are covered. A brief history of music technology, a detailed exploration of the MIDI specification and the techniques of configuring hardware and software systems for optimal effectiveness are also covered.~~	**Description**	An introduction to basic concepts and techniques of computer music. Students learn about representations of audio signals and musical data, including corresponding concepts in physics and music theory, and experiment with creating digital music through sampling and audio synthesis. Students gain basic facility with programming in a language/environment designed for creating interactive computer music works. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: New title provides better specificity with respect to existing course content; "introduction" is being prepended to all 2000-level core major courses; some computer programming and design knowledge and/or basic audio pre-production knowledge (MTEC 1201/MTEC 1202/MTEC 1102/ENT 1270) is helpful.

MTEC 2250 Fabrication for Physical Computing

CUNYFirst Course ID			
Course Number and Title	MTEC 2250 Fabrication for Physical Computing		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title	~~Fabrication for Physical Computing~~	**Course Title**	Digital Fabrication
Prerequisite	~~MTEC 1005, MTEC 1102~~	**Prerequisite**	MTEC 1201

Corequisite		**Corequisite**	
Pre- or corequisite	~~MTEC 1201~~	**Pre- or corequisite**	MTEC 1202 and MTEC 1102 for MTEC students or ENT 1108 for ENT students
Hours		**Hours**	
Credits		**Credits**	
Description	~~A companion course to MTEC 2280, Ins and Outs, Fabrication for Physical Computing is a project-oriented course that focuses on digital fabrication techniques in emerging media practices. Students deepen their knowledge of 3D design tools for use in CNC, laser cutters, 3D printers and printed circuit boards. Students also explore and experiment with different materials available for the different fabrication machines.~~	**Description**	This project-oriented course focuses on digital fabrication and prototyping for emerging media. Students explore 3D design tools and techniques for computer-controlled fabrication such as CNC machining, laser cutting, and 3D printing. Experimenting with a variety of prototyping processes, students learn to actualize their designs through multiple methodologies. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: We are changing the pre-reqs to resituate this course within the MTEC curriculum while creating a smoother pathway for ENT students. The title change reflects its focus on digital fabrication, while broadening its relevance from just physical computing to MTEC's multiple focus areas.

MTEC 2260 Synthesis and Sampling

CUNYFirst Course ID			
Course Number and Title	MTEC 2260 Synthesis and Sampling		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number	~~2260~~	**Course Number**	3240
Course Title	~~Synthesis and Sampling~~	**Course Title**	Advanced Computer Music
Prerequisite	~~ENT 1270~~	**Prerequisite**	MTEC 2240

Corequisite		**Corequisite**	
Pre- or corequisite		**Pre- or corequisite**	
Hours		**Hours**	
Credits		**Credits**	
Description	~~This hands-on course explores the principles of sound and note generation in music technology. Study begins with an investigation of the historical and theoretical backgrounds of synthesis, and then moves to programming in a variety of different synthesis engines. The second half of the course covers topics and principles of digital audio sampling as it applies to music technology. During the process, students will explore differences between sampling and synthesis techniques, and determine when to use them to best effect. The course will conclude with a presentation of work to the class and instructor. (offered as needed)~~	**Description**	This course builds on computer music fundamentals introduced in prerequisite courses. Topics may include, but are not limited to, time- and frequency-domain audio analysis, music information retrieval, advanced audio synthesis techniques, compositional algorithms, and generative music. Students develop their programming ability by implemented projects in a language/environment designed for creating interactive computer music works. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: This course helps fill out the new primary focus area in Computer Music.

MTEC 2280 Ins and Outs

CUNYFirst Course ID			
Course Number and Title	MTEC 2280 Ins and Outs		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title	~~Ins and Outs~~	**Course Title**	Physical Computing
Prerequisite	~~MTEC 1201, MTEC 1005~~	**Prerequisite**	none
Corequisite		**Corequisite**	

Pre- or corequisite	~~ENT 1250 or ENT 1260 or ENT 1270 or MTEC 1202~~	**Pre- or corequisite**	MTEC 2250
Hours		**Hours**	
Credits		**Credits**	
Description	~~An introduction to interactive technology with a focus on how we use technology to express ourselves and interact with our environment. This class combines a hands-on exploration of basic components of media, audio and control circuits. Students also develop interfacing technologies from simple switches to multidimensional sensors, integrated circuits and microcontrollers. Students use a scripting environment to program microcontrollers in order to process incoming data from sensors for control of media systems~~	**Description**	Students learn to sense and control the physical world through hardware and software, creating interactive interfaces beyond conventional computing. Students gain skills in basic electronics, circuit assembly, and microcontroller programming for sensor and actuator control. The course culminates in a self-directed physical computing project, moving through a design process from ideation to functional prototype. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: MTEC 1005 (1-credit lab) is being closed and its materiel subsumed by this course; "introduction" is being prepended to all 2000-level core major courses; ENT 1260 no longer exists, and ENT 1240 provides fundamentals of electricity that will be beneficial to study in parallel.

MTEC 3125 Nonlinear Narrative

CUNYFirst Course ID			
Course Number and Title	MTEC 3125 Nonlinear Narrative		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title		**Course Title**	

Prerequisite	~~ENG 1121, MTEC 2120~~	**Prerequisite**	ENG 1121, MTEC 2210 or MTEC 2240 or MTEC 2250 or MTEC 2280
Corequisite		**Corequisite**	
Pre- or corequisite		**Pre- or corequisite**	
Hours		**Hours**	
Credits		**Credits**	
Description	~~Through the examination of the earliest gestures of cave drawings to sophisticated multimedia narratives, students study the ingredients and structures necessary for compelling storytelling. Through hands-on projects, students produce visual, auditory, written and integrated sequences using animation, video, sound, music, text, and dialog.~~	**Description**	Through the examination of the earliest gestures of cave drawings to sophisticated multimedia narratives, students study the ingredients and structures necessary for compelling storytelling. Through hands-on projects, students produce visual, auditory, written and integrated sequences using animation, video, sound, music, text, and dialog. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[X] Yes [ ] No	**Liberal Arts**	[X] Yes [ ] No
Course Attribute (e.g. Writing Intensive, Honors, etc	WI	**Course Attribute (e.g. Writing Intensive, Honors, etc**	WI

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: MTEC 2120 was a placeholder that allowed us to ensure that at least one foundational course in the major was taken. New prerequisite explicitly lists the four 2000-level foundational major courses.

MTEC 3140 Topics and Perspectives in Emerging Technologies

CUNYFirst Course ID			
Course Number and Title	MTEC 3140 Topics and Perspectives in Emerging Technologies		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number	~~3140~~	**Course Number**	1000
Course Title	~~Topics and Perspectives in Emerging Technologies~~	**Course Title**	Topics and Perspectives in Emerging Media Technology

Prerequisite	~~MTEC 2210 and MTEC 2230; for non MTEC majors: ENG 1773 Weird Science or ENG 2420 Science Fiction~~	**Prerequisite**	CUNY writing proficiency
Corequisite		**Corequisite**	
Pre- or corequisite		**Pre- or corequisite**	
Hours		**Hours**	
Credits		**Credits**	
Description	~~This course provides an introduction to the study and analysis of emerging technologies and how this influences practical process. Students will examine how technologies have evolved historically as well as develop perspectives on how they would best be used in the future. Major topics will include computing history, human-computer interaction, computers and culture, and the ethical and social implications of new technologies. In the lab component of the course, students will learn to employ methods of documentation currently in use at research institutions and in private industry in order to place research being done in a wider context.~~	**Description**	This introductory course explores the evolution of emerging technologies and their impact on society. Students develop perspectives on the ways in which technological and societal change affect one other. Key topics include computing history, human-computer interaction, computers and culture, and the ethical and social implications of new technologies. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[X] Yes [ ] No	**Liberal Arts**	[X] Yes [ ] No
Course Attribute (e.g. Writing Intensive, Honors, etc	WI	**Course Attribute (e.g. Writing Intensive, Honors, etc**	WI

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary ~~[X] Advanced Liberal Arts~~	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: This survey course should be placed earlier in the curriculum to prepare students with ideas and applications in emerging media technology before they get into technical implementation. As currently offered, there is no course material that would necessitate MTEC 2230 or MTEC 2210 as prerequisites, nor any other prerequisites beyond writing proficiency.

MTEC 3160 Performance Design

CUNYFirst Course ID			
Course Number and Title	MTEC 3160 Performance Design		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title		**Course Title**	

Prerequisite	~~MTEC 2120, MTEC 2250; Equivalent to old course MTEC 2160~~	**Prerequisite**	MTEC 2210, MTEC 2240, MTEC 2250, MTEC 2280
Corequisite		**Corequisite**	
Pre- or corequisite		**Pre- or corequisite**	
Hours		**Hours**	
Credits		**Credits**	
Description	~~Students learn to design live performance systems and time domain installations involving the composition of multiple media. Topics and projects focus on interactive technologies in live experience media venues.~~	**Description**	Students learn to design live performance systems and installations involving the composition of multiple media. Topics and projects focus on interactive technologies for real-time events. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[X] Yes [ ] No	**Liberal Arts**	[X] Yes [ ] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [X] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [X] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: MTEC 3160 requires skills learned in all four 2000-level foundational courses in the major.

MTEC 3175 Experimental Game Design and Development

CUNYFirst Course ID			
Course Number and Title	MTEC 3175 Experimental Game Design and Development		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number	~~3175~~	**Course Number**	4250
Course Title	~~Experimental Game Design and Development~~	**Course Title**	Rapid Prototyping for Games
Prerequisite	~~MTEC 2210~~	**Prerequisite**	MTEC 3150

Corequisite		**Corequisite**	
Pre- or corequisite	~~MTEC 1202~~	**Pre- or corequisite**	none
Hours		**Hours**	
Credits		**Credits**	
Description	~~This hands-on studio course focuses on the creation of innovative workable prototypes exploring expressive forms of gameplay using a variety of multimedia approaches, methodologies and materials. The aesthetics of game design, including asset and character development, level design, game play experience and delivery systems is covered. Supplemental readings on the complex interplay between story and game is used to analyze effective narrative devices and game mechanics. The class covers game theory, design exercises and in-depth analysis of works across commercial, art & social change sectors.~~	**Description**	This hands-on studio course focuses on the creation of innovative workable 2D & 3D prototypes exploring expressive forms of gameplay using a variety of multimedia approaches and methodologies. The course emphasizes the prototyping process and the challenge of creating prototypes quickly and effectively. The course also cover a range of topics relating to the aesthetics of game design and creating meaningful gameplay experiences. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: This focus of this course will shift from innovation in games to rapid prototyping of games. To improve sequencing of learning material for advanced games courses, MTEC 3150 "Intermediate Game Development" will now be required as a prerequisite. MTEC 1202 is already required in the chain of prerequisites leading to MTEC 3150.

MTEC 3230 Mixed Reality for Immersive Worlds

CUNYFirst Course ID			
Course Number and Title	MTEC 3230 Mixed Reality for Immersive Worlds		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title		**Course Title**	

Prerequisite	~~MTEC 2210~~	**Prerequisite**	MTEC 3150
Corequisite		**Corequisite**	
Pre- or corequisite	~~MTEC 1202~~	**Pre- or corequisite**	none
Hours		**Hours**	
Credits		**Credits**	
Description	~~An exploration of the new frontier of virtual, augmented and mixed reality across different market sectors. Students experiment with designing and developing game-based and interactive projects employing augmented reality (AR), virtual reality (VR), wearables, Internet-of-Things and machine learning for mobile, web and console environments. Students learn the fundamentals of Unity development, 3D modeling, stereoscopic perception and experiential design in the context of storytelling and content creation specific to these emerging forms. They work in small teams on collaborative projects with the latest head-mounted and sensor technology.~~	**Description**	An exploration of virtual, augmented and mixed reality (XR) across different sectors and for different applications. Students experiment with designing and developing mixed reality interactive experiences within a game engine. The course covers the fundamentals of XR development, 3D modeling, stereoscopic perception, locomotion and experiential design in the context of storytelling and content creation specific to the rapidly evolving emerging forms and devices. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: To improve sequencing of learning material for advanced games courses, MTEC 3150 "Intermediate Game Development" will now be required as a prerequisite. MTEC 1202 is already required in the chain of prerequisites leading to MTEC 3150.

MTEC 3240 Data Sonification and Visualization

CUNYFirst Course ID			
Course Number and Title	MTEC 3240 Data Sonification and Visualization		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number	~~3240~~	**Course Number**	3250
Course Title	~~Data Sonification and Visualization~~	**Course Title**	Asset Development for Games
Prerequisite	~~ENT 1270, MTEC 1202~~	**Prerequisite**	MTEC 2210
Corequisite		**Corequisite**	

Pre- or corequisite		**Pre- or corequisite**	
Hours		**Hours**	
Credits		**Credits**	
Description	~~An introduction to data sonification and visualization for games, installations, and scientific display. The technical skills and foundations covered apply to computer games, interactive music performance, multimedia art installations and environments for exploring multimedia scientific data. Students are exposed to audiovisual programming engines and sound computation basics. For final projects, students design and program an immersive environment, a game scene, or an interactive simulation.~~	**Description**	A foundation in digital media formats used in game development and content creation. Through project-based assignments, students focus on proper file preparation and organization as well as the creation, compression and integration of images, audio tracks, static meshes, video files and more. This course is designed to help students bridge the gap between ideation and production, giving their ideas the best possible chance at success by establishing and maintaining a baseline quality level for all assets and content they create or acquire. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: The course's focus will be narrowed to asset development for interactive video games.

MTEC 3280 Embedded Systems for Physical Computing

CUNYFirst Course ID			
Course Number and Title	MTEC 3280 Embedded Systems for Physical Computing		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number		**Course Number**	
Course Title	~~Embedded Systems for Physical Computing~~	**Course Title**	Emerging Interfaces
Prerequisite	~~MTEC 1202, MTEC 2280~~	**Prerequisite**	MTEC 2210, MTEC 2240, MTEC 2250, MTEC 2280

Corequisite		**Corequisite**	
Pre- or corequisite		**Pre- or corequisite**	
Hours		**Hours**	
Credits		**Credits**	
Description	~~A focus on the design and implementation of embedded systems with specific applications in emerging media including the following: audio media generation, storage, and playback; sensor control of computational environments in projection and animatronics; hardware control of interactive environments used in such applications as museum display and musical composition/performance. Common, low cost, available components are used and students apply the knowledge learned in this class to a working final prototype for one of these specific areas.~~	**Description**	Keyboard, mouse, button, knob, joystick. For decades, interfaces for interactive computing have largely remained stagnant. This course explores human-computer interaction beyond traditional interfaces, building upon physical computing fundamentals. Utilizing a variety of sensors and hardware, students integrate emerging media design principles with creative thinking to build unusual interactive systems for a new computing era. Projects may explore new interactive systems for games, audiovisual experiences, interactive objects, installations, live performance, and more. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	

Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression [ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: This course will now focus more narrowly on physical computing with respect to experimental and innovative interfaces for interactive media.

MTEC 4030 Computational Creativity

CUNYFirst Course ID			
Course Number and Title	MTEC 4030 Computational Creativity		
FROM:		**TO:**	
Department(s)		**Department(s)**	
Course Number	~~4030~~	**Course Number**	3430
Course Title	~~Computational Creativity~~	**Course Title**	Computational Creativity in Music

Prerequisite	~~MTEC 1202, MAT 2440~~	**Prerequisite**	MTEC 2240, MAT 2440
Corequisite		**Corequisite**	
Pre- or corequisite		**Pre- or corequisite**	
Hours		**Hours**	
Credits		**Credits**	
Description	~~Introduction to artificial intelligence techniques for computational creativity. Topics covered include formal grammars, Markov chains, hidden Markov models, probabilistic automata, and artificial neural networks. Students use these techniques to analyze and generate digital art and music.~~	**Description**	Introduction to artificial intelligence techniques for computational creativity in music. Topics covered may include, but are not limited to, formal grammars, Markov chains, hidden Markov models, and artificial neural networks. Students implement what they've learned in class to create their own generative music systems. 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.
Requirement Designation		**Requirement Designation**	
Liberal Arts	[ ] Yes [X] No	**Liberal Arts**	[ ] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc		**Course Attribute (e.g. Writing Intensive, Honors, etc**	
Course Applicability	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression	**Course Applicability**	[X] Major [ ] Gen Ed Required [ ] English Composition [ ] Mathematics [ ] Science [ ] Gen Ed - Flexible [ ] World Cultures [ ] US Experience in its Diversity [ ] Creative Expression

	[ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts		[ ] Individual and Society [ ] Scientific World [ ] Gen Ed - College Option [ ] Speech [ ] Interdisciplinary [ ] Advanced Liberal Arts
Effective Term	Spring 2025		

Rationale: The scope of this course originally addressed AI techniques for analysis and generation of content in several media categories. Going forward, the course will focus on analysis and generation of music and audio content.

Section AVI: Courses Withdrawn

Emerging Media Technology program, Entertainment Technology department

MTEC 1001 Game Design and Interactive Media Skills Lab
MTEC 1005 Physical Computing Skills Lab
MTEC 4800 Interdisciplinary Team Project

Rationale: MTEC 1001 and MTEC 1005 are supplanted by MTEC 2210 “Game Development” and MTEC 2280 “Physical Computing,” respectively. The content of MTEC 4800 is already well represented in the three sections of ENT 3320 “Technical Production” that students must take, and is also represented in the required courses MTEC 3501 “Culmination Project Development” and ENT 4501 “Culmination Project.”

New York City College of Technology, CUNY

NEW COURSE PROPOSAL FORM, MTEC 3200 Special Topics in Emerging Media Technology

This form is used for all new course proposals. Attach this to the Curriculum Modification Proposal Form and submit as one package as per instructions. Use one New Course Proposal Form for each new course.

Course Title	Special Topics in Emerging Media Technology
Proposal Date	9/26/2023 (ENT dept. approval date)
Proposer's Name	Hosni Auji, Allison Berkoy, and Adam Wilson
Course Number	MTEC 3200
Course Credits, Hours	3 credits, 2 class hours and 2 lab hours
Course Pre / Co-Requisites	MTEC 2210, MTEC 2230, MTEC 2240, MTEC 2280
Catalog Course Description	This course presents students with specialized topics related to the field of Emerging Media Technology not otherwise covered in detail elsewhere in the curriculum. The course may address a new development in the field or a specialization or research interest of the faculty. The content of this course varies over time. Students must take the course twice, but cannot take two Special Topics courses that cover that same material.
Brief Rationale Provide a concise summary of why this course is important to the department, school or college.	This course allows us to nimbly address new developments in technology, or specializations of the faculty that aren't addressed fully in other areas of the curriculum, without the delay of a curriculum change.
CUNY – Course Equivalencies Provide information about equivalent courses within CUNY, if any.	none
Intent to Submit as Common Core If this course is intended to fulfill one of the requirements in the common core, then indicate which area.	N/A
For Interdisciplinary Courses: - Date submitted to ID Committee for review - Date ID recommendation received - Will all sections be offered as ID? Y/N	N/A
Intent to Submit as a Writing Intensive Course	N/A

NEW COURSE PROPOSAL CHECK LIST

Use this checklist to ensure that all required documentation has been included. You may wish to use this checklist as a table of contents within the new course proposal.

Completed NEW COURSE PROPOSAL FORM	
• Title, Number, Credits, Hours, Catalog course description	X
• Brief Rationale	X
• CUNY – Course Equivalencies	X
Completed Library Resources and Information Literacy Form	X
Course Outline Include within the outline the following.	**X**
Hours and Credits for Lecture and Labs If hours exceed mandated Carnegie Hours, then rationale for this	X
Prerequisites/Co- requisites	X
Detailed Course Description	X
Course Specific Learning Outcome and Assessment Tables • Discipline Specific • General Education Specific Learning Outcome and Assessment Tables	X
Example Weekly Course outline	X
Grade Policy and Procedure	X
Recommended Instructional Materials (Textbooks, lab supplies, etc)	X
Library resources and bibliography	X
Course Need Assessment. Describe the need for this course. Include in your statement the following information.	
Target Students who will take this course. Which programs or departments, and how many anticipated? Documentation of student views (if applicable, e.g. non-required elective).	X
Projected headcounts (fall/spring and day/evening) for each new or modified course.	X
If additional physical resources are required (new space, modifications, equipment), description of these requirements. If applicable, Memo or email from the VP for Finance and Administration with written comments regarding additional and/or new facilities, renovations or construction.	N/A
Where does this course overlap with other courses, both within and outside of the department?	X

Does the Department currently have full time faculty qualified to teach this course? If not, then what plans are there to cover this?	X
If needs assessment states that this course is required by an accrediting body, then provide documentation indicating that need.	N/A
Course Design Describe how this course is designed.	
Course Context (e.g. required, elective, capstone)	X
Course Structure: how the course will be offered (e.g. lecture, seminar, tutorial, fieldtrip)?	X
Anticipated pedagogical strategies and instructional design (e.g. Group Work, Case Study, Team Project, Lecture)	X
How does this course support Programmatic Learning Outcomes?	X
Is this course designed to be partially or fully online? If so, describe how this benefits students and/or program.	X
Additional Forms for Specific Course Categories	
Interdisciplinary Form (if applicable)	N/A
Interdisciplinary Committee Recommendation (if applicable and if received)* *Recommendation must be received before consideration by full Curriculum Committee	N/A
Common Core (Liberal Arts) Intent to Submit (if applicable)	N/A
Writing Intensive Form if course is intended to be a WIC (under development)	N/A
If course originated as an experimental course, then results of evaluation plan as developed with director of assessment.	N/A
(Additional materials for Curricular Experiments)	
Plan and process for evaluation developed in consultation with the director of assessment. (Contact Director of Assessment for more information).	N/A
Established Timeline for Curricular Experiment	N/A

COURSE NEED ASSESSMENT

Detailed Rationale

MTEC 3200 allows us to address the rapid changes in technology in our field and to introduce rotating specialized topics without the overhead of formulating a continuous series of curriculum proposals.

Target Students

This course is intended for junior and senior MTEC students who have completed all four 2000-level courses in the major. See degree checklist for sequencing.

Projected Headcounts

Course capacity will be capped at 16, which is standard for the ENT department based on the capacity of our computer labs, and we expect to offer the course once per semester, possibly increasing to three to four times per year once cohorts who matriculated prior to this requirement have graduated.

Physical Resources

To some extent, topics to be addressed may be limited by physical resources available in the department and personally accessible by the students. Of paramount importance is access to a laptop that can support a variety of media computing tasks. Our recently passed Phase One curriculum change notes the inclusion of a laptop requirement for MTEC and ENT students. We intend to publish recommended specifications on our department webpage. The department has computer labs and floating laptops for checkout, as well as a number of peripheral devices and equipment that may be of use depending on the topic of semester, including video cameras, microphones, mixers, speakers, lighting components, MIDI devices, VR headsets, etc.

Overlap with Other Courses

None

Qualified Full-Time Faculty

We have four qualified full-time faculty members and many competent adjuncts available to teach this course.

COURSE DESIGN

Course Context

As mentioned in the detailed rationale, we need a course that enables us to quickly address changes in the field without the overhead of developing and proposing new courses. This course fills that need. It also allows us to involve students in the research interests of faculty when such interests intersect with programmatic learning outcomes and the research topic is not explored in depth elsewhere in the curriculum.

Course Structure

MTEC 3200 will be a combination lecture and practicum, divided equally into two hours of class and two hours of lab. Class time will be used to present tools and concepts, and lab will provide time for students to implement small projects with guidance from the instructor.

Anticipated Pedagogical Strategies and Instructional Design

Students will undertake short assignments to demonstrate understanding of concepts introduced in lecture. They will have an opportunity to experiment with these concepts by producing larger, independently conceived projects.

Support for Programmatic Learning Outcomes

This course directly supports two of the five major Emerging Media Technology program learning outcomes:
1. Attain mastery over elements of one or more of the primary focus areas of the major.
2. Attain proficiency in multiple computational, design, and media technologies.

Course Modality

The course modality (hybrid, in-person, online) will vary semester to semester based on the requirements of the topic to be addressed.

(draft prepared by Prof. Hosni Auji)

New York City College of Technology

Entertainment Technology Department
186 Jay Street, Room V-203 Brooklyn, NY 11201
(718) 260-5588 http://www.entertainmenttechnology.org

MTEC 3200 Topics and Perspectives in Emerging Media Technology
2 classroom hours, 2 lab hours, 3 credits
Prerequisites: MTEC 2210, MTEC 2240, MTEC 2250, MTEC 2280

Description
This course presents students with specialized topics related to the field of Emerging Media Technology not otherwise covered in detail elsewhere in the curriculum. The course may address a new development in the field or a specialization or research interest of the faculty. The content of this course varies over time. Students must take the course twice, but cannot take two Special Topics courses that cover that same material.

This Semester's Topic
An introduction to shaders and graphic rendering pipelines. Students will explore creating and modifying fragment and vertex shaders in both Shader Language and in Shader Graph, and learn how to integrate and dynamically modify their shaders in a game engine. The course will also cover the fundamentals of materials, lighting and texture mapping to establish a tech art foundation for game development and other interactive media applications.

Learning Outcomes

For the successful completion of this course, a student should be able to:	**Evaluation methods and criteria:**
Develop an understanding about the topic and how to apply it to their own work.	Students will complete graded assignments and projects that test their grasp of the material.
Demonstrate thoughtful and relevant insight into design processes.	To be assessed via in-class critiques and written post-mortems.

Gen Ed Learning Outcomes

For the successful completion of this course, a student should be able to:	**Evaluation methods and criteria:**

Employ scientific reasoning and logical thinking.	Students complete technical exercises, flow-charts, short study assignments, and projects employing logic-based computation.
Use creativity to solve problems.	Students use creative thinking in order to apply technical concepts to build code-driven interactive media projects.
Gather, interpret, evaluate, and apply information discerningly from a variety of sources.	Students complete assignments and projects based on synthesis from multiple sources: in-class lectures and demos, readings and technical exercises, reference materials, and targeted independent research.

COURSE STRUCTURE
Each session will consist of a Lecture/Seminar portion where the instructor will cover material and workshop applications live with class input and discussion. Sessions will also consist of lab time to give students the opportunity to work on class projects and assignments with the benefit of instructor feedback and troubleshooting.
The course will feature small assignments and exercises to test specific concepts, as well as two larger projects (midterm and final) that will allow for more creative applications and group collaborations.

REQUIRED MATERIALS
Access to a Mac or PC capable of running contemporary game engines and 3D authoring/texturing software.
All readings required for this course will be made available as PDF through Openlab.

COURSE GRADING
Final project: 30%
Midterm Project: 25%
Homework Assignments / Reading Responses: 25%
Participation and Attendance: 20%
Project and assignment grading will based on the following rubric:
Concept: How well does the student's idea address the assignment?
Process: How thorough and fruitful has the student's journey on this project been?
Presentation: How well was the student's submission executed and communicated?

All work must be submitted on time. Any late assignment will drop one letter grade per class session that it is late. Please contact your instructor if there are extenuating circumstances, in which case lateness may be excused on a case-by-case basis.

ACADEMIC INTEGRITY POLICY

Students and all others who work with information, ideas, texts, images, music, inventions, and other intellectual property owe their audience and sources accuracy and honesty in using, crediting, and citing sources. As a community of intellectual and professional workers, the College recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity. Accordingly, academic dishonesty is prohibited in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension, and expulsion. The complete text of the College policy on Academic Integrity may be found in the catalogue.

Instructor's note: all borrowed text, code, or media used for this course must be attributed to the original creator, whether human or AI. Any direct text quotes from another source must be specified with quotes and appropriately cited. Code borrowed from another source at more than four lines in length must be attributed as a //comment within the code itself. If you are unsure of whether or not your work may constitute plagiarism, please check with your instructor before submitting. Any instance of plagiarism will be reported to the MTEC Program Director, the Chair of ENT, and City Tech's Academic Integrity Officer.

COURSE ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES
In order to receive disability-related academic accommodations students must first be registered with the Center for Student Accessibility. Students who have a documented disability or suspect they may have a disability are invited to set up an appointment with the Center (phone: 718–260–5143). If you have already registered with the Center, please provide your professor with the course accommodation form and discuss your specific accommodation with him/her.

A NOTE ON CITY TECH'S COUNSELING CENTER
The Counseling Services Center supports the educational, emotional and career development of City Tech students by providing opportunities for skill development, counseling and referrals that address obstacles to success. The Center is currently available to students remotely and in-person. For questions and appointments, contact the Center at counseling@citytech.cuny.edu or 718-260-5030.

ENTERTAINMENT TECHNOLOGY DEPARTMENT COMMITMENT TO STUDENT DIVERSITY
This course welcomes students from all backgrounds, experiences, and perspectives. In accordance with the City Tech and CUNY missions, this course intends to provide an atmosphere of inclusion, respect, and the mutual appreciation of differences so that together we can create an environment in which all students can flourish.

MTEC STATEMENT ON INCLUSIVITY
Part I. Name + Pronoun Usage This course consists of individual work and group discussion. We must therefore strive to create an atmosphere of inclusion and mutual respect: all students will have their chosen gender pronoun(s) and chosen name recognized. If the class roster does not align with your name, gender, and/or pronouns, please inform the instructor.

Part II. Inclusivity Statement It is my intent that students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that the students bring to this class be viewed as an asset, resource, strength, and benefit, rather than a checklist item or worse, a hindrance. It is my intent to present materials and activities that are respectful of diversity: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally, or for other students or student groups. Feel free to reach out to me via email or Slack at any time about any issues concerning you or with any such ideas.

Topics

WEEK 1 - Defining Shaders, Meshes and the Rendering Pipeline
Getting oriented with the terminology and understanding the breadth and scope of the material to be covered.

WEEK 2 - Vector Math Primer
Understanding the basics of vectors, and the simple math operations needed to manipulate points in space through code.

WEEK 3 – Modifying a Shader
Students will learn how to intentionally adjust and expand on an existing shader.

WEEK 4 - Writing our first Shader
Starting a simple vert/frag shader from scratch.

WEEK 5 - Movement & Displacement with Shaders
Experimenting with moving mesh vertices with shaders to create animated effects.

WEEK 6 - Working Session: Debugging / Playtesting

WEEK 7 - Midterm Project Presentations

WEEK 8 - UV Unfolding and Mapping
Learning how to unfold a mesh's UV texture coordinates and prepare it for texturing.

WEEK 9 - The Standard Surface Shader
Discussing Physical based Rendering (PBR) and dissecting the Standard Surface Shader to understand its various maps and properties.

WEEK 10 - Lighting Models
Working with light, shadows and reflections in shaders.

WEEK 11 - Image Effects
Using our shader knowledge to create full screen 'post-processing' effects.

WEEK 12 - Creating Skyboxes

Creating and manipulating skyboxes using cube maps and other shader techniques.

WEEK 13 - Shader Optimization Techniques
Outlining tips, tricks, and recommendations for making sure our shaders run efficiently.

WEEK 14 - Working Session: Debugging / Playtesting

WEEK 15 - Final Project Presentations

LIBRARY RESOURCES & INFORMATION LITERACY: MAJOR CURRICULUM MODIFICATION

Please complete for **all** major curriculum modifications. This information will assist the library in planning for new courses/programs.

Consult with your library faculty subject specialist (http://cityte.ch/dir) **3 weeks before the proposal deadline**.

Course proposer: please complete boxes 1-4. **Library faculty subject specialist:** please complete box 5.

1	**Title of proposal** new course: MTEC 3200, "Special Topics in Emerging Media Techniogy;" part of a larger proposal titled Emerging Media Technology Program Modification, Phase Two	**Department/Program** Entertainment Technology department, Emerging Media Technology B.Tech program
	Proposed by (include email & phone) Adam Wilson (primary contact – awilson@citytech.cuny.edu, 718-260-5898), Hosni Auji, and Allison Berkoy	**Expected date course(s) will be offered** **# of students : 16**

2	**The library cannot purchase reserve textbooks for every course at the college, nor copies for all students. Consult our website (http://cityte.ch/curriculum) for articles and ebooks for your courses, or our open educational resources (OER) guide (http://cityte.ch/oer). Have you considered using a freely-available OER or an open textbook in this course?** Since the subject matter of this course is rotated from semester to semester, we will most likely rely on OER sourced by the current professor.

3	**Beyond the required course materials, are City Tech library resources sufficient for course assignments? If additional resources are needed, please provide format details (e.g. ebook, journal, DVD, etc.), full citation (author, title, publisher, edition, date), price, and product link.** Again, since the subject matter of this course is rotated from semester to semester, we will not know what library resources are available until we solidify the content for the upcoming semester and reach out to our library liaison.

4	**Library faculty focus on strengthening students' information literacy skills in finding, critically evaluating, and ethically using information. We collaborate on developing assignments and customized instruction and research guides. When this course is offered, how do you plan to consult with the library faculty subject specialist for your area? Please elaborate.** As soon as the course topic is solidified for any given semester, we plan to reach out to a librarian for guidance in choosing from existing resources on that topic. One question: if a book ends up being requested by a particular faculty member, what is a typical turnaround time for acquisition, if the library has funds to make the acquisition?

5	**Library Faculty Subject Specialist Anne Leonard for Junior Tidal Comments and Recommendations:** Reaching out to the librarian subject specialist as early as is practicable is a great strategy to ensure that print and online resources are in place, as is making use of OERs when possible. Collaboration between the librarian and instructor is key to ensuring that the research guide is up-to-date and that core and supplemental resources are available, particularly in the case of a special topics course. Depending on the special topic, the librarian and instructor should collaborate on an information literacy session and/or resources for a research guide to support students' research for their final projects. Date 9/25/2023

New York City College of Technology, CUNY

NEW COURSE PROPOSAL FORM, MTEC 3380 Body Controlled Media

This form is used for all new course proposals. Attach this to the Curriculum Modification Proposal Form and submit as one package as per instructions. Use one New Course Proposal Form for each new course.

Course Title	Body Controlled Media
Proposal Date	9/26/2023 (ENT dept. approval date)
Proposer's Name	Allison Berkoy
Course Number	MTEC 3380
Course Credits, Hours	3 credits, 2 class hours and 2 lab hours
Course Pre / Co-Requisites	Prerequisites: MTEC 2210, MTEC 2240, MTEC 2250, MTEC 2280
Catalog Course Description	Control a story with voice commands. Trigger a song with a smile. Navigate a game with dance moves. This course focuses on interactive media controlled solely through body movement. Students explore interaction through touchless interfaces such as physical presence, motion, gesture, voice, and body position. Utilizing a range of tools, from basic sensors to computer vision algorithms powered by AI, the course asks how body-centered interfaces transform our experience of the world around us.
Brief Rationale Provide a concise summary of why this course is important to the department, school or college.	MTEC 3380 "Body Controlled Media" introduces a much-needed course tying together elements of many focus areas within the program while also providing students with exposure to advanced concepts in physical computing.
CUNY – Course Equivalencies Provide information about equivalent courses within CUNY, if any.	None
Intent to Submit as Common Core If this course is intended to fulfill one of the requirements in the common core, then indicate which area.	N/A
For Interdisciplinary Courses: - Date submitted to ID Committee for review - Date ID recommendation received - Will all sections be offered as ID? Y/N	N/A

Intent to Submit as a Writing Intensive Course	N/A

Please include all appropriate documentation as indicated in the NEW COURSE PROPOSAL Combine all information into a single document that is included in the Curriculum Modification Form.

NEW COURSE PROPOSAL CHECK LIST

Use this checklist to ensure that all required documentation has been included. You may wish to use this checklist as a table of contents within the new course proposal.

Completed NEW COURSE PROPOSAL FORM	
• Title, Number, Credits, Hours, Catalog course description	X
• Brief Rationale	X
• CUNY – Course Equivalencies	X
Completed Library Resources and Information Literacy Form	X
Course Outline Include within the outline the following.	**X**
Hours and Credits for Lecture and Labs If hours exceed mandated Carnegie Hours, then rationale for this	X
Prerequisites/Co- requisites	X
Detailed Course Description	X
Course Specific Learning Outcome and Assessment Tables • Discipline Specific • General Education Specific Learning Outcome and Assessment Tables	X
Example Weekly Course outline	X
Grade Policy and Procedure	X
Recommended Instructional Materials (Textbooks, lab supplies, etc)	X
Library resources and bibliography	X
Course Need Assessment. Describe the need for this course. Include in your statement the following information.	
Target Students who will take this course. Which programs or departments, and how many anticipated? Documentation of student views (if applicable, e.g. non-required elective).	X
Projected headcounts (fall/spring and day/evening) for each new or modified course.	X
If additional physical resources are required (new space, modifications, equipment), description of these requirements. If applicable, Memo or email from the VP for Finance and Administration with written comments regarding additional and/or new facilities, renovations or construction.	N/A
Where does this course overlap with other courses, both within and outside of the department?	X

Does the Department currently have full time faculty qualified to teach this course? If not, then what plans are there to cover this?	X
If needs assessment states that this course is required by an accrediting body, then provide documentation indicating that need.	N/A
Course Design Describe how this course is designed.	
Course Context (e.g. required, elective, capstone)	X
Course Structure: how the course will be offered (e.g. lecture, seminar, tutorial, fieldtrip)?	X
Anticipated pedagogical strategies and instructional design (e.g. Group Work, Case Study, Team Project, Lecture)	X
How does this course support Programmatic Learning Outcomes?	X
Is this course designed to be partially or fully online? If so, describe how this benefits students and/or program.	X
Additional Forms for Specific Course Categories	
Interdisciplinary Form (if applicable)	N/A
Interdisciplinary Committee Recommendation (if applicable and if received)* *Recommendation must be received before consideration by full Curriculum Committee	N/A
Common Core (Liberal Arts) Intent to Submit (if applicable)	N/A
Writing Intensive Form if course is intended to be a WIC (under development)	N/A
If course originated as an experimental course, then results of evaluation plan as developed with director of assessment.	N/A
(Additional materials for Curricular Experiments)	
Plan and process for evaluation developed in consultation with the director of assessment. (Contact Director of Assessment for more information).	N/A
Established Timeline for Curricular Experiment	N/A

COURSE NEED ASSESSMENT

Detailed Rationale

This course adds a much needed advanced course to the "Experiential Media" focus of the MTEC curriculum, building from the foundations learned in MTEC 2280 Physical Computing, while tying together the additional MTEC focus areas within interactive media more broadly. Students learn fundamental concepts and technical know-how for triggering media using various body control methods, which may be applied to ranging applications such as physical computing, gaming, audiovisual, and live performance experiences. The course also takes advantage of recent developments in AI and machine learning platforms, exploring browser-based methods for body control media. These

methods build upon MTEC 1201 and 1202 courses Computer Programming for Interactive Media I and II.

Target Students
This course targets MTEC students who have completed the required course of MTEC 2280 Physical Computing. Students wishing to deepen practice in physical computing may apply concepts and techniques from this course to any MTEC focus area. Students from other programs may be admitted on a case by case basis with permission of the instructor.

Projected Headcounts
Course capacity will be capped at 16, which is standard for the ENT department.

Physical Resources
Students need access to laptops for this course. Our recently passed Phase One curriculum change notes the inclusion of a laptop requirement for MTEC and ENT students. We intend to publish recommended specifications on our department webpage. The department has computer labs and floating laptops for checkout, as well as a number of peripheral devices and equipment that may be of use. We currently have in stock the majority of the sensors, microcontrollers, and other electrical components needed for the course, and we intend to build up this stock over time. Most of the sensors are very low in price (many under a dollar) and the course is flexible as to which sensors we explore. Otherwise, all software used is open source and free for use. There are currently no resource bottlenecks for running the course.

Overlap with Other Courses
This course builds off of fundamentals learned in MTEC 1201, 1202, and 2280, with some review of concepts as needed. There is a small amount of overlap with concepts and skills implemented in MTEC 3280 Emerging Interfaces, another advanced level physical computing course in the curriculum. The courses have different focuses, with different tools, concepts, and software platforms explored.

Qualified Full-Time Faculty

We have at least one full-time faculty member available to teach this course. The course may flexibly adapt to adjunct instructors' areas of expertise within body controlled media (for example, a deeper focus on sensor hardware or browser-based applications, etc. as appropriate).

COURSE DESIGN

Course Context
This course offers an advanced level physical computing course in MTEC's Experiential Media focus, building off of prior courses in the MTEC curriculum, while tying together all MTEC focus areas pertaining to interactive media. Body Controlled Media traces current techniques in sensor implementation while taking advantage of recent developments in browser-based machine learning platforms for body tracking.

Course Structure
The course is a combination of lecture and lab. Students apply techniques learned in the lectures to short weekly lab assignments, focused on skill and concept building. The final section of the course is devoted to developing a significant final project in body controlled media, moving through an iterative design process with weekly milestones and deliverables.

Anticipated Pedagogical Strategies and Instructional Design
Students learn concepts and techniques through multiple modalities including lecture, readings, videos, and hands-on labs implementing techniques. The course is designed to frontload the technical foundations with manageable rapid prototyping labs. The structure of rapid prototyping also supports regular goal-setting and practice with manageable project scoping, further supporting student success when planning and scoping final projects. Regular milestones and deliverables within the final project assignment support a manageable final project scope, consistent progress towards goals, and quick identification of any bottlenecks preventing progress.

Support for Programmatic Learning Outcomes

This course directly supports one of the five major Emerging Media Technology program learning outcomes:
1. Attain proficiency in multiple computational, design, and media technologies.

The course also provides groundwork for approaching the other four, which include:
2. Attain mastery over elements of one or more of the primary focus areas of the major.
3. Complete a portfolio of work suitable for use in job or graduate school applications.
4. Attain proficiency in cooperative design and collaborative production.
5. Attain proficiency in project management.

Course Modality and Associated Benefits
This course has the flexibility of being taught fully in person, hybrid, or fully online. The in person and hybrid modalities benefit from larger access to hardware sensor components and their collaborative usage. An online version benefits from more in depth work with browser-based tools and platforms, integrating AI and machine learning into body controlled media applications.

(draft prepared by Prof. Allison Berkoy)

New York City College of Technology

Entertainment Technology Department
186 Jay Street, Room V-203 Brooklyn, NY 11201
(718) 260-5588 http://www.entertainmenttechnology.org

MTEC 3380 Body Controlled Media
2 classroom hours, 2 lab hours, 3 credits
Prerequisites: MTEC 2210, MTEC 2240, MTEC 2250, MTEC 2280

Description
Control a story with voice commands. Trigger a song with a smile. Navigate a game with dance moves. This course focuses on interactive media controlled solely through body movement. Students explore interaction through touchless interfaces such as physical presence, motion, gesture, voice, and body position. Utilizing a range of tools, from basic sensors to computer vision algorithms powered by AI, the course asks how body-centered interfaces transform our experience of the world around us.

Learning Outcomes

For the successful completion of this course, a student should be able to:	**Evaluation methods and criteria:**
Identify a variety of techniques for creating body controlled interfaces	Students participate in discussions and brainstorming sessions, create written proposals, and implement techniques in lab assignments.
Identify and implement sensors for different types of body control (presence, motion, vocal, etc.)	Students participate in discussions and brainstorming sessions, create written proposals, and implement techniques in lab assignments.
Create rapid prototypes of body controlled interfaces	Students present the results of rapid prototypes in their lab assignments, with evaluation based on process and completion of guided steps over final outcome.

Design and execute a functional body controlled media project through an iterative design process	Students submit final project proposals, give regular presentations on project milestones, and submit weekly deliverables. Further evaluation considered through peer feedback and critique.

Gen Ed Learning Outcomes

For the successful completion of this course, a student should be able to:	**Evaluation methods and criteria:**
Employ scientific reasoning and logical thinking.	Students complete technical exercises, flow-charts, short study assignments, and projects employing logic-based computation.
Use creativity to solve problems.	Students use creative thinking in order to apply technical concepts to build code-driven interactive media projects.
Gather, interpret, evaluate, and apply information discerningly from a variety of sources.	Students complete assignments and projects based on synthesis from multiple sources: in-class lectures and demos, readings and technical exercises, reference materials, and targeted independent research.

COURSE STRUCTURE

The course combines lectures/presentations, critiques/discussions, and lab/studio time. Students apply techniques learned in the lectures to short weekly lab assignments, focused on skill and concept building. The final section of the course is devoted to developing a significant final project in body controlled media, moving through an iterative design process with weekly milestones and deliverables.

PROJECTS AND ASSIGNMENTS

Participation (in-class discussions, labs and other activities) 20%…
Rapid Prototype Labs 40%
Final Projects 40%

REQUIRED MATERIALS

Access to a Mac or PC computer with microphone and webcam, capable of running browser-based course software.
Free accounts set up with Slack and GitHub.

COURSE GRADING

All work must be submitted on time. Any late assignment will drop one letter grade per class session that it is late. Please contact your instructor if there are extenuating circumstances, in which case lateness may be excused on a case-by-case basis.

ACADEMIC INTEGRITY POLICY

Students and all others who work with information, ideas, texts, images, music, inventions, and other intellectual property owe their audience and sources accuracy and honesty in using, crediting, and citing sources. As a community of intellectual and professional workers, the College recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity. Accordingly, academic dishonesty is prohibited in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension, and expulsion. The complete text of the College policy on Academic Integrity may be found in the catalogue.

Instructor's note: all borrowed text, code, or media used for this course must be attributed to the original creator, whether human or AI. Any direct text quotes from another source must be specified with quotes and appropriately cited. Code borrowed from another source at more than four lines in length must be attributed as a //comment within the code itself. If you are unsure of whether or not your work may constitute plagiarism, please check with your instructor before submitting. Any instance of plagiarism will be reported to the MTEC Program Director, the Chair of ENT, and City Tech's Academic Integrity Officer.

COURSE ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

In order to receive disability-related academic accommodations students must first be registered with the Center for Student Accessibility. Students who have a documented disability or suspect they may have a disability are invited to set up an appointment with the Center (phone: 718–260–5143). If you have already registered with the Center, please provide your professor with the course accommodation form and discuss your specific accommodation with him/her.

A NOTE ON CITY TECH'S COUNSELING CENTER

The Counseling Services Center supports the educational, emotional and career development of City Tech students by providing opportunities for skill development, counseling and referrals that address obstacles to success. The Center is currently available to students remotely and in-person. For questions and appointments, contact the Center at counseling@citytech.cuny.edu or 718-260-5030.

ENTERTAINMENT TECHNOLOGY DEPARTMENT COMMITMENT TO STUDENT DIVERSITY

This course welcomes students from all backgrounds, experiences, and perspectives. In accordance with the City Tech and CUNY missions, this course intends to provide an atmosphere of inclusion, respect, and the mutual appreciation of differences so that together we can create an environment in which all students can flourish.

MTEC STATEMENT ON INCLUSIVITY
Part I. Name + Pronoun Usage This course consists of individual work and group discussion. We must therefore strive to create an atmosphere of inclusion and mutual respect: all students will have their chosen gender pronoun(s) and chosen name recognized. If the class roster does not align with your name, gender, and/or pronouns, please inform the instructor.

Part II. Inclusivity Statement It is my intent that students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that the students bring to this class be viewed as an asset, resource, strength, and benefit, rather than a checklist item or worse, a hindrance. It is my intent to present materials and activities that are respectful of diversity: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally, or for other students or student groups. Feel free to reach out to me via email or Slack at any time about any issues concerning you or with any such ideas.

Topics

WEEK 1

Introductions
History of Natural User Interfaces (NUI) and "Body as Controller"

WEEK 2

Rapid Prototyping Challenge 1:
Motion and proximity sensing (Infrared distance and break-beam, ultrasonic, PIR, LDR, LIDAR)

WEEK 3

Rapid Prototyping Challenge 2:
Biometric sensing (heart rate, galvanic skin response, muscle, eye tracking)

WEEK 4

Rapid Prototyping Challenge 3:
Sound sensing (microphone, piezoelectric)

WEEK 5

Rapid Prototyping Challenge 4:
Keypoint and skeleton tracking with TensorFlow and ML5.js

WEEK 6

Rapid Prototyping Challenge 5:
Pose detection and ML with Teachable Machine

WEEK 7

Rapid Prototyping Challenge 6:
Voice control (amplitude and frequency detection, speech synthesis, vocal training with ML)

WEEK 8

Final Project Proposal Development

WEEK 9

Final Project R&D - WIP milestone 1 presentations / lab time

WEEK 10

Final Project R&D - WIP milestone 1 presentations / lab time

WEEK 11

Final Project R&D - WIP milestone 2 presentation / lab time

WEEK 12

Final Project R&D - WIP milestone 2 presentation / lab time

WEEK 13

System Prototype Demos + Playtesting

WEEK 14

System Prototype Demos + Playtesting

WEEK 15

Final Project Presentations / Critiques

LIBRARY RESOURCES & INFORMATION LITERACY: MAJOR CURRICULUM MODIFICATION

Please complete for **all** major curriculum modifications. This information will assist the library in planning for new courses/programs.

Consult with your library faculty subject specialist (http://cityte.ch/dir) **3 weeks before the proposal deadline**.

Course proposer: please complete boxes 1-4. **Library faculty subject specialist:** please complete box 5.

1	**Title of proposal** new course: MTEC 3380, "Body Controlled Media," part of a larger proposal titled Emerging Media Technology Program Modification, Phase Two	**Department/Program** Entertainment Technology department, Emerging Media Technology B.Tech program
	Proposed by (include email & phone) Allison Berkoy aberkoy@citytech.cuny.edu	**Expected date course(s) will be offered: spring 2025** **# of students : 16**

2	**The library cannot purchase reserve textbooks for every course at the college, nor copies for all students. Consult our website (http://cityte.ch/curriculum) for articles and ebooks for your courses, or our open educational resources (OER) guide (http://cityte.ch/oer). Have you considered using a freely-available OER or an open textbook in this course?** Yes, the course materials will be based on open source and instructor-created materials.

3	**Beyond the required course materials, are City Tech library resources sufficient for course assignments? If additional resources are needed, please provide format details (e.g. ebook, journal, DVD, etc.), full citation (author, title, publisher, edition, date), price, and product link.** Yes.

4	**Library faculty focus on strengthening students' information literacy skills in finding, critically evaluating, and ethically using information. We collaborate on developing assignments and customized instruction and**

research guides. When this course is offered, how do you plan to consult with the library faculty subject specialist for your area? Please elaborate.

Students may pull from existing library resources for physical computing, programming, and interactive media design. Otherwise, it may be helpful to connect students with guides regarding plagiarism, ethical usage of borrowed code, and use of AI / ML within projects.

5 **Library Faculty Subject Specialist Anne Leonard for Junior Tidal**
Comments and Recommendations: Collaboration between the instructor and the librarian subject specialist around resources to support students' research for their final projects is important. Questions about ethical use of code, generative AI, and machine learning could be very well explored through a collaboration between the instructor and librarian that results in an information literacy lesson.
Date: 9/25/2023

New York City College of Technology, CUNY

NEW COURSE PROPOSAL FORM, MTEC 3470 Mixing and Mastering

This form is used for all new course proposals. Attach this to the Curriculum Modification Proposal Form and submit as one package as per instructions. Use one New Course Proposal Form for each new course.

Course Title	Mixing and Mastering
Proposal Date	9/26/2023 (ENT dept. approval date)
Proposer's Name	Adam Wilson
Course Number	MTEC 3470
Course Credits, Hours	2 classroom hours, 2 lab hours, 3 credits
Course Pre / Co-Requisites	Prerequisites: MTEC 2240 or ENT 2370
Catalog Course Description	Fundamentals of post-production audio mixing and mastering.
Brief Rationale Provide a concise summary of why this course is important to the department, school or college.	Students in the MTEC Music Technology concentration (which will become the Computer Music focus pending approval of this proposal) and students in the sound module in ENT have been asking for a course in audio mixing in mastering. Sound in ENT has historically focused mostly on live sound applications, and Music Technology in MTEC is focused on real-time interactive sound and audio synthesis. We therefore have a curricular hole in the form of audio post-production that this course will fill.
CUNY – Course Equivalencies Provide information about equivalent courses within CUNY, if any.	Similar courses in CUNY that could potentially be considered equivalent include MUSIC 740 and 741 Digital Recording and Composition II at Queens College, MUSC 7016X Advanced Audio Recording Techniques and Engineering at Brooklyn College, and 32600 Audio Production Techniques 2 at City College.
Intent to Submit as Common Core If this course is intended to fulfill one of the requirements in the common core, then indicate which area.	N/A
For Interdisciplinary Courses: - Date submitted to ID Committee for review - Date ID recommendation received - Will all sections be offered as ID? Y/N	N/A
Intent to Submit as a Writing Intensive Course	N/A

Please include all appropriate documentation as indicated in the NEW COURSE PROPOSAL Combine all information into a single document that is included in the Curriculum Modification Form.

NEW COURSE PROPOSAL CHECK LIST

Use this checklist to ensure that all required documentation has been included. You may wish to use this checklist as a table of contents within the new course proposal.

Completed NEW COURSE PROPOSAL FORM	
• Title, Number, Credits, Hours, Catalog course description	X
• Brief Rationale	X
• CUNY – Course Equivalencies	X
Completed Library Resources and Information Literacy Form	X
Course Outline Include within the outline the following.	**X**
Hours and Credits for Lecture and Labs If hours exceed mandated Carnegie Hours, then rationale for this	X
Prerequisites/Co- requisites	X
Detailed Course Description	X
Course Specific Learning Outcome and Assessment Tables • Discipline Specific • General Education Specific Learning Outcome and Assessment Tables	X
Example Weekly Course outline	X
Grade Policy and Procedure	X
Recommended Instructional Materials (Textbooks, lab supplies, etc)	X
Library resources and bibliography	X
Course Need Assessment. Describe the need for this course. Include in your statement the following information.	
Target Students who will take this course. Which programs or departments, and how many anticipated? Documentation of student views (if applicable, e.g. non-required elective).	X
Projected headcounts (fall/spring and day/evening) for each new or modified course.	X
If additional physical resources are required (new space, modifications, equipment), description of these requirements. If applicable, Memo or email from the VP for Finance and Administration with written comments regarding additional and/or new facilities, renovations or construction.	N/A
Where does this course overlap with other courses, both within and outside of the department?	X

Does the Department currently have full time faculty qualified to teach this course? If not, then what plans are there to cover this?	X
If needs assessment states that this course is required by an accrediting body, then provide documentation indicating that need.	N/A
Course Design Describe how this course is designed.	
Course Context (e.g. required, elective, capstone)	X
Course Structure: how the course will be offered (e.g. lecture, seminar, tutorial, fieldtrip)?	X
Anticipated pedagogical strategies and instructional design (e.g. Group Work, Case Study, Team Project, Lecture)	X
How does this course support Programmatic Learning Outcomes?	X
Is this course designed to be partially or fully online? If so, describe how this benefits students and/or program.	X
Additional Forms for Specific Course Categories	
Interdisciplinary Form (if applicable)	N/A
Interdisciplinary Committee Recommendation (if applicable and if received)* *Recommendation must be received before consideration by full Curriculum Committee	N/A
Common Core (Liberal Arts) Intent to Submit (if applicable)	N/A
Writing Intensive Form if course is intended to be a WIC (under development)	X
If course originated as an experimental course, then results of evaluation plan as developed with director of assessment.	N/A
(Additional materials for Curricular Experiments)	
Plan and process for evaluation developed in consultation with the director of assessment. (Contact Director of Assessment for more information).	N/A
Established Timeline for Curricular Experiment	N/A

COURSE NEED ASSESSMENT

Target Students

This course targets students in both the Emerging Media Technology and Entertainment Technology programs who are interested in developing competency at mixing and mastering stereo audio in a post-production environment. Both MTEC and ENT students registering for this class will have had some introduction to concepts covered depth in this course, either in MTEC 2240, Introduction to Computer Music, or ENT 2370, Sound Technology II.

Projected Headcounts

Course capacity will be capped at 16, which is standard for the ENT department, and we expect to initially offer the course once a year.

Physical Resources

We have our sound lab, V120, which has 16 workstations, each with digital audio software, USB audio interfaces with headphone jacks, MIDI keyboards and mics. This room also includes speakers suitable for classroom demonstration, but not critical mixing. We have recently purchased Genelec audio monitors and soundproof panels that we plan to install in one of our other rooms; these could be used by students to check mixes developed on headphones in V120.

Overlap with Other Courses

ENT 2370 "Sound Technology II" – the proposed ENT student prerequisite for this course – addresses mixing to some extent, but course material is split between recording techniques and mixing, and does not include mastering.

Qualified Full-Time Faculty

We have several qualified full-time faculty members in both the ENT and MTEC programs available to teach this course.

COURSE DESIGN

Course Context

Sound studies in ENT have historically focused mostly on live sound applications, and the Music Technology concentration in MTEC is focused on real-time interactive sound and audio synthesis. We therefore have a curricular hole in the form of audio post-production that this course will fill.

Course Structure

Mixing and Mastering will be a combination lecture and lab. Students will apply techniques learned in lecture to small mixing projects throughout the course of the semester. A final project, using provided tracks or, optionally, original music provided by the students, will be mixed, mastered, and critiqued in class. Readings and listening analysis will be assigned weekly.

Anticipated Pedagogical Strategies and Instructional Design

Students will work individually on small mixing assignments and, at the end, a final project, which will all be collectively critiqued in class. Each assignment will involve the application of a technique learned in lecture. Grading will not be based on the aesthetics

of the results, which can be subjective, but the degree to which execution of each assignment demonstrates understanding of an associated technique.

Support for Programmatic Learning Outcomes

This course supports three major Emerging Media Technology program learning outcomes:
1. Attain mastery over elements of one or more of the primary focus areas of the major.
2. Complete a portfolio of work suitable for use in job or graduate school applications.
3. Attain proficiency in multiple computational, design, and media technologies.

Course Modality

MTEC 3470 has the flexibility to be taught as an in-person or hybrid course with little modification.

(draft prepared by Prof. Adam Wilson)

New York City College of Technology
Entertainment Technology Department
186 Jay Street, Room V-203 Brooklyn, NY 11201
(718) 635-2192 http://www.entertainmenttechnology.org

MTEC 3470 Mixing and Mastering
2 classroom hours, 2 lab hours, 3 credits

Prerequisites: MTEC 2240 or ENT 1270

Course Description
Fundamentals of post-production audio mixing and mastering.

Learning Outcomes

For the successful completion of this course, a student should be able to:	Evaluation methods:
Demonstrate an understanding of the basic techniques of mixing and mastering.	Small mixing projects, each focused on one technique in isolation, will be critiqued. A final project allows students to practice synthesizing these techniques.
Give and receive feedback on creative project ideas.	Students will participate in regular group critique, both verbal and written.

General Education Learning Outcomes

For the successful completion of this course, a student should be able to:	Evaluation methods:
Demonstrate integrative thinking	Students must synthesize knowledge culled from lectures, readings, and in-class labs to successfully implement their final projects.
Apply information gathered from observation, experience, reflections, and communication.	Small weekly mixing projects allow students to demonstrate their ability to implement mixing techniques discussed in class.

Graded Assignments
- Participation in in-class labs and assignments: 60%
- Final project: 40%

Instructional Materials
- Book: Owsinski, Bobby. *The Mixing Engineer's Handbook: 5th Edition*. 2022.
- digital audio workstation software
- personal headphones

Weekly Topics

Week 1

- Lecture: What is mixing? Overview of the basic tools of stereo mixing: levels & panning, equalization, dynamics processing, time-based effects.
- Listening and analysis: examples of well-mixed and mastered music and poorly mixed and mastered music in a variety of genres.
- Assignment: bring in a favorite music recording (we will analyze one or two each session through the lens of any techniques we've discussed up to that point)

Week 2

- Lecture: Setting up the mixing environment, including speaker setup and room acoustics compensation; discussion of loudness perception, metering (peak, RMS, loudness), and various measures of sound pressure.
- In-class analysis and discussion of one or two favorite music recordings.
- Lab: use a microphone and spectrum analyzer to identify problems with room acoustics in the classroom.
- Assignment: selected readings from Owsinski.

Week 3

- Lecture: introduction to the digital audio workstation, including sample rate and bit depth, audio file formats, inputs and outputs, inserts, busses, sends and aux tracks.
- In-class analysis and discussion of one or two favorite music recordings.
- Look at routing and organization in an example project.
- Assignment: selected readings from Owsinski.

Week 4

- Lecture: organization and labelling of project source material; groups and subgroups .
- In-class analysis and discussion of one or two favorite music recordings.
- Lab: label and group an unordered collection of course tracks.
- Assignment: selected readings from Owsinski.

Week 5

- Lecture: dealing with problems in source material: phase misalignment, clicks and pops, levels, signal-to-noise ratio.
- In-class analysis and discussion of one or two favorite music recordings.
- Lab: apply techniques learned in class to resolve phase issues between tracks representing one source recorded by multiple mics.
- Assignment: selected readings from Owsinski.

Week 6

- Lecture: space and presence; placing elements in the stereo field.
- In-class analysis and discussion of one or two favorite music recordings.
- Lab: set levels and panning for a group of tracks to foreground certain instruments.
- Assignment: selected readings from Owsinski.

Week 7

- Lecture: dynamics processing; gates/expanders and compressors/limiters, including multiband variants.
- In-class analysis and discussion of one ot two favorite music recordings.
- Lab: experiment with the application of compression to snare and kick drum separately in a percussion mix; experiment with compressing the entire drumkit mix bus.
- Assignment: selected readings from Owsinski.

Week 8

- Lecture: giving elements their own space, or an introduction to filters and equalizers and sidechain techniques.
- In-class analysis and discussion of one or two favorite music recordings.
- Lab: EQ a test mix so that different elements dominate different frequency bands; apply sidechain compression to allow a snare drum to cut through the mix.
- Assignment: selected readings from Owsinski.

Week 9

- Lecture: automation and dynamic mixes; how to apply envelopes to parameters including fader levels, compression ratios, etc.
- In-class analysis and discussion of one or two favorite music recordings.
- Lab: automate levels to swap melodic foreground between two tracks in a mix.
- Assignment: selected readings from Owsinski.

Week 10

- Lecture: techniques for using time-based effects, including reverb and delay, such as routing tracks to both master and a reverb aux to exploit a single instance of the effect at different levels for different instruments.
- In-class analysis and discussion of one or two favorite music recordings.
- Lab: use a single convolution reverb to create depth in a multitrack mix.
- Assignment: selected readings from Owsinski.

Week 11

- Lecture: What is mastering? Equalizing stereo mixdown tracks; dithering; processing dynamics to meet the requirements of various media formats.
- In-class analysis and discussion of one or two favorite music recordings.
- Lab: master a stereo track to the specifications of an online streaming service.
- Assignment: selected readings from Owsinski.

Week 12

- In-class analysis and discussion of one or two favorite music recordings.
- Lab: continue mastering a stereo track to the specifications of an online streaming service.

Week 13

- Lecture: Preparing the final project – parameters and requirements.
- In-class analysis and discussion of one or two favorite music recordings.
- Lab: Begin work on the final project.

Week 14

- In-class analysis and discussion of one or two favorite music recordings.
- Continue work on the final project.

Week 15

- Final project demonstrations and class critique.

Grade Policy and Procedure

Email
Students are required to use official City Tech email for correspondence.

Attendance
Attendance is expected at every class meeting. Much of the course involves in-class labs and group critique, which cannot be undertaken individually outside of class.

Academic Integrity
Students and all others who work with information, ideas, texts, images, music, inventions, and other intellectual property owe their audience and sources accuracy and honesty in using, crediting, and citing sources. As a community of intellectual and professional workers, the College recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity. Accordingly, academic dishonesty is prohibited in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension, and expulsion. The complete text of the College policy on Academic Integrity may be found in the catalog.

Grading/Deadlines
Students will receive qualitative written and verbal feedback from the professor. Grades are determined by the extent to which completed lab assignments, including the final project, demonstrate understanding of techniques introduced in class.

Deadlines and attendance must be observed, as the sequencing of material is crucial; missing a day or deadline can result in a loss of credit for the affected assignment.

Entertainment Technology Department Commitment to Student Diversity
This course welcomes students from all backgrounds, experiences, and perspectives. In accordance with the City Tech and CUNY missions, this course intends to provide an atmosphere of inclusion, respect, and the mutual appreciation of differences so that together we can create an environment in which all students can flourish.

LIBRARY RESOURCES & INFORMATION LITERACY: MAJOR CURRICULUM MODIFICATION

Please complete for **all** major curriculum modifications. This information will assist the library in planning for new courses/programs.

Consult with your library faculty subject specialist (http://cityte.ch/dir) **3 weeks before the proposal deadline**.

Course proposer: please complete boxes 1-4. **Library faculty subject specialist:** please complete box 5.

1	**Title of proposal** new course: MTEC 3470, "Mixing and Mastering," part of a larger proposal titled Emerging Media Technology Program Modification, Phase Two	**Department/Program** Entertainment Technology department, Emerging Media Technology B.Tech program
	Proposed by (include email & phone) Adam Wilson awilson@citytech.cuny.edu	**Expected date course(s) will be offered: Spring 2025** **# of students : 16**

2	**The library cannot purchase reserve textbooks for every course at the college, nor copies for all students. Consult our website (http://cityte.ch/curriculum) for articles and ebooks for your courses, or our open educational resources (OER) guide (http://cityte.ch/oer). Have you considered using a freely-available OER or an open textbook in this course?** We will be relying to some extent on OER generated by the professor, but the course does rely on a book, Owsinski, Bobby. *The Mixing Engineer's Handbook: 5th Edition*. 2022.

3	**Beyond the required course materials, are City Tech library resources sufficient for course assignments? If additional resources are needed, please provide format details (e.g. ebook, journal, DVD, etc.), full citation (author, title, publisher, edition, date), price, and product link.** It would be great to have one or two copies of the book (see above) on reserve. It is relatively inexpensive.

4	**Library faculty focus on strengthening students' information literacy skills in finding, critically evaluating, and ethically using information. We collaborate on developing assignments and customized instruction and**

research guides. When this course is offered, how do you plan to consult with the library faculty subject specialist for your area? Please elaborate.

It would be great to comb through journals, electronic or otherwise, subscribed to by the library, to see if there are any focused on audio engineering that might have articles appropriate for supplemental reading.

5 **Library Faculty Subject Specialist Anne Leonard for Junior Tidal**
Comments and Recommendations: Further integration of OER into the course is encouraged, and the librarian subject specialist can help identify potential course material. Once the course is scheduled to run, please contact the librarian to confirm that copies of the required book are to be placed on reserve. The syllabus, assigned readings, and bibliography are essential for developing the library's print and online resources to support students' projects. In #4 above, the possibility of a literature search to locate articles on audio engineering suggests a potential collaboration between instructor and librarian on an information literacy session on finding and evaluating popular, professional, and scholarly literature on the topic.
9/25/2023

Consultation with Affected Departments

Correspondence with MAT Department (from Phase One, passed spring 2023)

Re: requesting MAT support for MTEC curriculum change

Jonathan Natov

Mon 8/15/2022 3:30 PM

To:Adam J Wilson <AWilson@citytech.cuny.edu>;

Cc:John McCullough <JMcCullough@citytech.cuny.edu>;

Dear Professor Wilson,

This is to express my support for adding MTECH 1202 as an alternative prerequisite to MAT 2440.

Wishing you success in getting MTECH 1202 approved,

Jonathan

Professor Jonathan Natov
Mathematics Department Chair, N711
New York City College of Technology
300 Jay Street, Brooklyn NY 11201

From: Adam J Wilson
Sent: Sunday, July 31, 2022 6:17:35 PM
To: Jonathan Natov
Cc: John McCullough
Subject: requesting MAT support for MTEC curriculum change

Hi Jonathan,

I'm writing to you about an Emerging Media Technology program curriculum proposal we plan to submit in fall 2022.

One of our concentrations, Media Computation, requires students to take MAT 2440, "Discrete Structures and Algorithms."

We've found this course to be very useful, and, as part of an initiative to give students in all of our concentrations better programming foundations, our proposal would make MAT 2440 a requirement for everyone enrolled in the Emerging Media Technology bachelor's degree.

Normally our students take CST 1201, "Programming Fundamentals," as the computer science prerequisite for MAT 2440, but we are planning to replace that course with an internal programming course: MTEC 1202, "Computer Programming for Interactive Media (2)."

We are hoping you'll support adding our new course as a prerequisite alternative to CST 1201/CST 2403/MAT 1630 for MAT 2440.

Correspondence with CST Department (from Phase One passed spring 2023)

Thursday, October 27, 2022 at 13:45:13 Eastern Daylight Time

Subject: Re: requesting CST support for MTEC curriculum change
Date: Thursday, October 27, 2022 at 1:19:17 PM Eastern Daylight Time
From: Ashwin Satyanarayana
To: Adam J Wilson
CC: John McCullough

Hello Adam,

After reviewing the proposal and meeting with Adam (over Zoom), the CST department fully supports the establishment of the two new courses MTEC 1201 and MTEC 1202. The two new courses are geared towards helping MTEC students better prepare themselves for JavaScript. The CST 1101 and CST 1201 are more focused on Python and Java. With this rationale in mind, the CST department has no objections to this proposal.

Best Regards,

Ashwin

Ashwin Satyanarayana, Ph.D.
Associate Professor / Department Chair
Department of Computer Systems Technology,
New York City College of Technology
300 Jay Street - Namm 913, Brooklyn, NY 11201
Ph: (718) 260-5161

Department Minutes Indicating Approval of Curriculum Changes

NEW YORK CITY COLLEGE OF TECHNOLOGY

The City University of New York
300 Jay Street Brooklyn, NY 11201-2983
Entertainment Technology Department V203
(718) 260-5588 ● Fax: (718) 260-5591

AD HOC DEPARTMENT MEETING MEMORANDUM

Issue Date:	Sept. 26, 2023
To:	All Attendees
Department:	Entertainment Technology
Meeting Date:	Sept. 26, 2023 @ 12:00 PM
Location:	Virtual

Attendee Name
John McCullough (chair), Allison Berkoy, Adam Wilson, Hosni Auji, Sue Brandt, Elliot Yokum.
Absent: Miguel Valderrama, Ryoya Terao

Department Representing
Entertainment Technology

1 **Vote to Approve MTEC Phase Two Curriculum Proposal**
- Adam Wilson reviewed final changes to the proposal document.
- MTEC Phase Two Curriculum Proposal was approved unanimously.