MTEC 211. Principles of Motion. 3 Hours.
Semester course; 2 lecture and 3 studio hours. 3 credits. Students will explore the various materials and tools in the design of motion as a medium for creative practice. Emphasis is placed on emerging technologies and future potentials related to motion in creative practice and may include projects related to video and film, 2D and 3D motion graphics/animation, and kinetic installations.

MTEC 212. Principles of Sound. 3 Hours.
Semester course; 2 lecture and 3 studio hours. 3 credits. Students will explore sound as a design medium for the creation of sound tracks for a variety of needs, involving specification, acquisition or creation of auditory elements using audio production techniques and tools. Emphasis is placed on emerging technologies and future potentials related to sound design and may include projects incorporating sound recording, sound synthesis, performance, spatial acoustics and acoustic installations.

MTEC 221. Precedent, Context and Futures. 3 Hours.
Semester course; 3 lecture hours. 3 credits. A pluralistic survey of historical examples, contemporary precedents and future potentials of creative practice as an entity that is disrupted, shaped and enabled by changes in technology, media and context. Emphasis is placed on exploring creative practice as a process that is inseparable from contextual conditions.

MTEC 222. Process and Content. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Analysis of a range of methods, processes and philosophies used in the production of creative work. Distinction is made between the processes used to create work, the content and themes that the work explores, and the formats and materials used to realize the artifacts and outcomes resulting from the work. Emphasis is placed on exploring historical, contemporary and future models of process and content development used to manage and facilitate the development of creative work.

MTEC 301. Synthesis Studio. 3 Hours.
Semester course; 2 lecture and 3 studio hours. 3 credits. May be repeated for a maximum of 12 credits. This course will facilitate creative experimentation, individual student agency, critical engagement, research and speculation. Students engage in collaborative inquiry, peer learning and interdependent discovery in order to synthesize skills and ideas accumulated from other courses -- both inside and outside the program -- into creative work that builds toward developing individualized creative practices. Emphasis is placed on vertical integration of students across the sophomore and junior levels of the program through collaborative inquiry and peer learning. This course includes a comprehensive assessment of each student’s creative practice near the end of each semester.

MTEC 313. Computational Art and Design. 3 Hours.
Semester course; 2 lecture and 3 studio hours. 3 credits. Students will explore the various materials and tools in the design of information and computational processes related to creative practice. Explores tools, technologies, software, processes and artifacts relevant to creative work involving computation. Emphasis is placed on emerging technologies and future potentials related to computation and may include projects related to parametric design, generative form making, data-driven design, programming, artificial intelligence and computer-aided fabrication.

MTEC 314. Interaction. 3 Hours.
Semester course; 2 lecture and 3 studio hours. 3 credits. Students will learn about tools, technologies, software, processes and artifacts relevant to creative practice incorporating interactive systems. Emphasis is placed on emerging technologies and future potentials related to interaction and may include projects related to participatory systems, interface design, app design, physical computing, responsive artifacts and interactive installations.

MTEC 315. Emergent Systems and Game Design. 3 Hours.
Semester course; 2 lecture and 3 studio hours. 3 credits. Students will explore tools, technologies, software, processes and artifacts relevant to creative practice incorporating emergent systems and game design. Emphasis is placed on emerging technologies and future potentials related to emergent systems and game design and may include projects in game design, emergent systems, world building, content creation, interactive narrative, systems design and play.

MTEC 323. Emerging Practices. 3 Hours.
Semester course; 3 lecture hours. 3 credits. An overview and analysis of emerging and future fields of creative practice enabled by technology developments, new media and cultural conditions. Emphasis is placed on emerging technologies, economies, cultures and commodities and their implications for new creative practices. Students examine contemporary art markets, design practices, entrepreneurship opportunities and future areas of economic practice, as well as the cultural implications, legal frameworks, politics and ethics of these practices.

MTEC 324. Criticality. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Through research, critical analysis and discussion, students will examine a range of theoretical frameworks, philosophies, concepts and themes relevant to the contemporary discourse surrounding creative practice in emerging media and technology. Students assess and reflect on their individual practice and its relation to the field.

MTEC 401. Thesis Studio I. 6 Hours.
Semester course; 3 lecture and 9 studio hours. 6 credits. Prerequisites: MTEC 221, MTEC 222, MTEC 301, MTEC 323 and MTEC 324. Students will participate in data collection, analysis, writing and development of a conceptual framework. The outcome from this course paves the way for the establishment of the programmatic phase, including literature review, development of theoretical framework, case studies, and skills. Emphasis is placed on research, experimentation and speculation toward themes, aesthetics and conceptual development in order to demonstrate an individualized creative practice relevant to contemporary discourse and future possibilities in the field.

MTEC 402. Thesis Studio II. 6 Hours.
Semester course; 3 lecture and 9 studio hours. 6 credits. Prerequisite: MTEC 401. Students will develop, execute and defend a capstone body of work demonstrating synthesis of a diverse array of knowledge, skills and experience gained over their progression through the program. Emphasis is placed on research, experimentation and speculation toward themes, aesthetics and conceptual development in order to demonstrate an individualized creative practice relevant to contemporary discourse and future possibilities in the field.
MTEC 493. Practicum. 3 Hours.
Semester course; 1 lecture and 6 studio hours. 3 credits. In this culminating practicum, students are required to complete a supervised practical work experience that is coordinated with professional emerging media and technology professionals. The process and outcome are supervised by a faculty member to confirm successful completion of the training. Assessment measures include the employer's evaluation of the practicum, mid-term report and final practicum presentation.