

# MUSIC TECHNOLOGY

## Program Description

Foothill College's Music Technology Program (MTEC) offers cutting-edge curriculum, instruction, and hands-on training in the areas of digital media content creation based on real-world industry standards. MTEC is an innovative educational program that integrates art and music with science and technology using a vocational strategy that enables students to realize a competitive advantage in an ever-evolving, digital-centric socioeconomic era. In addition to preparing students to pursue baccalaureate degrees at four-year institutions, the Foothill College MTEC program prepares students for diverse, productive careers in digital media content creation for music, technology, liberal and audio-visual arts, and communications.

At a more granular level, MTEC prepares students for careers in recording arts, music production, electronic music, game audio, audio post for film and video, marketing, concert promotion, online delivery, technical support, entrepreneurship, business administrative positions, and many other digital media based career options. By participating in the MTEC program, students can obtain an Associate in Arts degree and Certificates of Achievement in Music Technology, Pro Tools, Game Audio, Audio Post Production, Electronic Music, and Songwriting. Additional certificates include Music Business and Music and Medicine. Our degree and certificates can conveniently be completed on campus, online, or in any combination.

The Foothill College Music Technology Program is one of the largest in the state of California and provides an entrance to a career in the entertainment and media industry. As an Avid Learning Partner (considering Avid is the standard platform used in the media industry), we offer the highest level of Avid Pro Tools Certification. We also offer training on Wwise and FMOD, the industry standard middleware applications for game audio.

The MTEC curriculum offers students the option to design their course of study to meet their needs. To augment their core courses, students may choose elective courses from music or related fields like media studies, photography, graphic design, and computer science. Because all these fields are very closely related, students can focus on areas that reflect their individual interests and goals. All musical styles and genres are supported and welcomed. Our goal is to give students the opportunity to succeed based on their talent, interest and hard work. All MTEC courses are transferable to California State Universities and many transfer to the University of California system as well.

MTEC courses are available on campus during the day and evening, as well as online, to fit each student's scheduling needs. MTEC students have access to Foothill's spacious, fully equipped, state-of-the-art recording studio facility, which includes a Dolby Atmos surround sound mixing stage. Students also have the option to complete all coursework online and at home.

Learn more about the program on the [Music Technology website](#).

## Program Learning Outcomes

Students who complete the MTEC program will be able to:

- Demonstrate proficiency with various aspects of digital media content creation, including the use of hardware, software, digital

asset management practices and other areas identified by the program's Board of Advisors.

- Apply concepts from audio engineering, acoustics, sound synthesis, music theory, computer literacy and team collaboration in practical situations to optimize digital media production workflows.
- Demonstrate proficiency with audio-video equipment including live content acquisition, microphones, video cameras, sound reinforcement, post-production editing, mixing, mastering, metering, and system troubleshooting.
- Evaluate merits of professional media productions with an understanding of technical and aesthetic considerations appropriate for various genres.
- Distinguish between related career paths associated with the discipline of Music Technology including digital media content creation, technical support, marketing, entrepreneurship and business administrative positions.

## Career Opportunities

Career opportunities in the music and media industry have never been more diverse or plentiful as they are today. Students have the opportunity to enter the industry in a variety of positions. Positions are available to qualified artists and professionals in Music Production, Audio Post-Production, Game Audio, Video Production, Podcasting and a host of other areas. Due to the phenomenal growth of new technology and the communication available via the internet, opportunities exist literally anywhere the student chooses.

## Award Type(s)

- AA = Associate in Arts Degree
- CA = Certificate of Achievement
- CP = Certificate of Proficiency [Non-Transcriptable]

## Units Required

- Major: 40
- Certificate(s): 16-40

## Associate Degree Requirements

Code	Title	Units
<b>English Proficiency</b>		
Select one of the following:		
ENGL 1A	COMPOSITION & READING	5
ENGL 1AH	HONORS COMPOSITION & READING	5
ENGL 1S & ENGL 1T	INTEGRATED COMPOSITION & READING and INTEGRATED COMPOSITION & READING	8
or equivalent		
<b>Mathematics Proficiency</b>		
Select one of the following:		
MATH 105	INTERMEDIATE ALGEBRA	5
MATH 180	QUANTITATIVE REASONING	5
or any MATH course approved for Foothill GE Area V, Communication & Analytical Thinking		

A minimum of 90 units is required<sup>1</sup> to include:

- Completion of one of the following general education patterns: Foothill General Education, CSU General Education Breadth

Requirements or the Intersegmental General Education Transfer Curriculum (IGETC)

- Core courses (32 units)
- Support courses (8 units)

<sup>1</sup> Additional elective course work may be necessary to meet the 90-unit minimum requirement for the associate degree.

**Note:** All courses pertaining to the major must be taken for a letter grade. In addition, a grade of "C" or better is required for all core and support courses used for the degree or certificates.

## Core and Support Courses

Code	Title	Units
<b>Core Courses</b>		
MTEC 50A	INTRODUCTION TO MUSIC TECHNOLOGY	4
MTEC 51A	STUDIO RECORDING I	4
or MTEC 60A	PRODUCING IN THE HOME STUDIO I	
MTEC 52A	MIXING & MASTERING I	4
MTEC 55A	INTRODUCTION TO GAME AUDIO	4
MTEC 57A	SOUND DESIGN FOR FILM & VIDEO	4
MTEC 62A	COMPOSING & PRODUCING ELECTRONIC MUSIC I	4
MTEC 70A	PRO TOOLS 101-AVID CERTIFICATION	4
or MTEC 72A	PRODUCING MUSIC WITH REASON	
or MTEC 72B	PRODUCING MUSIC WITH ABLETON LIVE	
or MTEC 72C	PRODUCING MUSIC WITH LOGIC PRO X	
And one course from the following:		4
MTEC 49	HISTORY OF MUSIC TECHNOLOGY	
MUS 9B	MUSIC & MEDIA: HENDRIX TO HIP-HOP	
MUS 11B	FUNK, FUSION & HIP-HOP	
MUS 11D	HISTORY OF ELECTRONIC MUSIC: ORIGINS-1970	
MUS 11E	HISTORY OF ELECTRONIC MUSIC: 1970-PRESENT	
<b>Support Courses</b>		
Select eight units from the following:		8
MTEC 49	HISTORY OF MUSIC TECHNOLOGY <sup>1</sup>	
MTEC 51B	STUDIO RECORDING II	
MTEC 51C	STUDIO RECORDING III	
MTEC 52B	MIXING & MASTERING II	
MTEC 53A	AUDIO PLUG-INS & SIGNAL PROCESSING	
MTEC 53B	AUDIO PLUG-INS & VIRTUAL INSTRUMENTS	
MTEC 54A	MUSIC THEORY FOR AUDIO PRODUCERS	
MTEC 55B	ADVANCED SOUND DESIGN FOR GAMES	
MTEC 55C	MUSIC COMPOSITION FOR GAMES	
MTEC 57B	SURROUND SOUND PRODUCTION	
MTEC 60A	PRODUCING IN THE HOME STUDIO I <sup>1</sup>	
MTEC 60B	PRODUCING IN THE HOME STUDIO II	
MTEC 62B	COMPOSING & PRODUCING ELECTRONIC MUSIC II	
MTEC 62C	COMPOSING & PRODUCING ELECTRONIC MUSIC III	
MTEC 66A	MUSIC VIDEO PRODUCTION	
MTEC 70A	PRO TOOLS 101-AVID CERTIFICATION <sup>1</sup>	
MTEC 70B	PRO TOOLS 110-AVID CERTIFICATION	
MTEC 70C	PRO TOOLS 201-AVID CERTIFICATION	
MTEC 70D	PRO TOOLS 210M-AVID CERTIFICATION	

MTEC 70E	PRO TOOLS 210P-AVID CERTIFICATION
MTEC 70F	PRO TOOLS 310M-AVID CERTIFICATION
MTEC 70G	PRO TOOLS 310P-AVID CERTIFICATION
MTEC 72A	PRODUCING MUSIC WITH REASON <sup>1</sup>
MTEC 72B	PRODUCING MUSIC WITH ABLETON LIVE <sup>1</sup>
MTEC 72C	PRODUCING MUSIC WITH LOGIC PRO X <sup>1</sup>
MTEC 80A	MUSIC BUSINESS
MTEC 80B	ENTERTAINMENT LAW & NEW MEDIA
MTEC 80C	BASICS OF MUSIC PUBLISHING
MTEC 82A	CAREERS IN MUSIC TECHNOLOGY
MTEC 82B	MARKETING YOUR MUSIC
MTEC 82C	INTRODUCTION TO THE VIDEO GAME BUSINESS
MTEC 84A	MUSIC & MEDICINE
or MUS 83A	MUSIC & MEDICINE
MTEC 88A	SONGWRITING I
MTEC 88B	SONGWRITING II
MTEC 88C	SONGWRITING III
MUS 7F	MUSIC IN FILM
MUS 11D	HISTORY OF ELECTRONIC MUSIC: ORIGINS-1970 <sup>1</sup>
MUS 11E	HISTORY OF ELECTRONIC MUSIC: 1970-PRESENT <sup>1</sup>
MUS 11F	VIDEO GAMES & POPULAR CULTURE
or MDIA 13	VIDEO GAMES & POPULAR CULTURE
MUS 70R	INDEPENDENT STUDY IN MUSIC/MUSIC TECHNOLOGY
MUS 71R	INDEPENDENT STUDY IN MUSIC/MUSIC TECHNOLOGY
MUS 72R	INDEPENDENT STUDY IN MUSIC/MUSIC TECHNOLOGY
MUS 73R	INDEPENDENT STUDY IN MUSIC/MUSIC TECHNOLOGY
MDIA 1	INTRODUCTION TO FILM STUDIES
or MDIA 1H	HONORS INTRODUCTION TO FILM STUDIES
MDIA 11	INTRODUCTION TO POPULAR CULTURE
or MDIA 11H	HONORS INTRODUCTION TO POPULAR CULTURE
MDIA 20	FUNDAMENTALS OF MEDIA PRODUCTION
MDIA 30	DIGITAL VIDEO EDITING I

**Total Units** **40**

<sup>1</sup> May be completed only once for credit to satisfy either the core or support course requirements.

## Certificate Requirements

### Certificate of Achievement in Music Technology

- Units: 40

The certificate of achievement is awarded after completion of the core and support courses. General education courses are not required.

### Certificate of Achievement in Game Audio I

- Units: 16

Code	Title	Units
MTEC 55A	INTRODUCTION TO GAME AUDIO	4
MTEC 55B	ADVANCED SOUND DESIGN FOR GAMES	4

MTEC 55C	MUSIC COMPOSITION FOR GAMES	4
MUS 11F	VIDEO GAMES & POPULAR CULTURE	4
or MDIA 13	VIDEO GAMES & POPULAR CULTURE	
<b>Total Units</b>		<b>16</b>

### Certificate of Achievement in Game Audio II

• Units: 24

Code	Title	Units
MTEC 55A	INTRODUCTION TO GAME AUDIO	4
MTEC 55B	ADVANCED SOUND DESIGN FOR GAMES	4
MTEC 55C	MUSIC COMPOSITION FOR GAMES	4
MTEC 70A	PRO TOOLS 101-AVID CERTIFICATION	4
MTEC 70B	PRO TOOLS 110-AVID CERTIFICATION	4
MUS 11F	VIDEO GAMES & POPULAR CULTURE	4
or MDIA 13	VIDEO GAMES & POPULAR CULTURE	
<b>Total Units</b>		<b>24</b>

### Certificate of Achievement in Pro Tools

• Units: 24

Code	Title	Units
MTEC 50A	INTRODUCTION TO MUSIC TECHNOLOGY	4
MTEC 52A	MIXING & MASTERING I	4
or MTEC 53A	AUDIO PLUG-INS & SIGNAL PROCESSING	
MTEC 70A	PRO TOOLS 101-AVID CERTIFICATION	4
MTEC 70B	PRO TOOLS 110-AVID CERTIFICATION	4
MTEC 70C	PRO TOOLS 201-AVID CERTIFICATION	4
MTEC 70D	PRO TOOLS 210M-AVID CERTIFICATION	4
or MTEC 70E	PRO TOOLS 210P-AVID CERTIFICATION	
<b>Total Units</b>		<b>24</b>

### Certificate of Achievement in Audio Post Production

• Units: 16

Code	Title	Units
MTEC 57A	SOUND DESIGN FOR FILM & VIDEO	4
MTEC 57B	SURROUND SOUND PRODUCTION	4
MTEC 70A	PRO TOOLS 101-AVID CERTIFICATION	4
MTEC 70B	PRO TOOLS 110-AVID CERTIFICATION	4
<b>Total Units</b>		<b>16</b>

### Certificate of Achievement in Electronic Music

• Units: 16

Code	Title	Units
MTEC 52A	MIXING & MASTERING I	4
MTEC 62A	COMPOSING & PRODUCING ELECTRONIC MUSIC I	4
MTEC 62B	COMPOSING & PRODUCING ELECTRONIC MUSIC II	4
MTEC 70A	PRO TOOLS 101-AVID CERTIFICATION	4
or MTEC 72B	PRODUCING MUSIC WITH ABLETON LIVE	
or MTEC 72C	PRODUCING MUSIC WITH LOGIC PRO X	
<b>Total Units</b>		<b>16</b>

### Certificate of Achievement in Songwriting

• Units: 16

Code	Title	Units
MTEC 88A	SONGWRITING I	4
MTEC 88B	SONGWRITING II	4
MTEC 88C	SONGWRITING III	4
MUS 10	MUSIC FUNDAMENTALS	4
or MTEC 54A	MUSIC THEORY FOR AUDIO PRODUCERS	
<b>Total Units</b>		<b>16</b>

### Music Business Certificate of Proficiency

• Units: 16 [Non-Transcriptable]

Code	Title	Units
MTEC 80A	MUSIC BUSINESS	4
And three courses from the following:		12
MTEC 80B	ENTERTAINMENT LAW & NEW MEDIA	
MTEC 80C	BASICS OF MUSIC PUBLISHING	
MTEC 82A	CAREERS IN MUSIC TECHNOLOGY	
MTEC 82B	MARKETING YOUR MUSIC	
<b>Total Units</b>		<b>16</b>

### Music and Medicine Certificate of Proficiency

• Units: 16 [Non-Transcriptable]

Code	Title	Units
MTEC 50A	INTRODUCTION TO MUSIC TECHNOLOGY	4
MTEC 51A	STUDIO RECORDING I	4
or MTEC 60A	PRODUCING IN THE HOME STUDIO I	
MTEC 54A	MUSIC THEORY FOR AUDIO PRODUCERS	4
MTEC 84A	MUSIC & MEDICINE	4
<b>Total Units</b>		<b>16</b>

### Pro Tools Certificate of Proficiency

• Units: 16 [Non-Transcriptable]

Code	Title	Units
MTEC 70A	PRO TOOLS 101-AVID CERTIFICATION	4
MTEC 70B	PRO TOOLS 110-AVID CERTIFICATION	4
MTEC 70C	PRO TOOLS 201-AVID CERTIFICATION	4
MTEC 70D	PRO TOOLS 210M-AVID CERTIFICATION	4
or MTEC 70E	PRO TOOLS 210P-AVID CERTIFICATION	
<b>Total Units</b>		<b>16</b>