



New York City College of Technology
Entertainment Technology Department
300 Jay Street, Room V-205 Brooklyn, NY 11201
(718) 260-5588

MTEC 2250-D292 Tangible Media Skills

Lecture Hours, Lab Hours, Studio Hours, Credits and Total Hours

Prerequisites: MTEC 1005, PRE- OR CO-REQUISITE OF IMT 1102

SPRING 2015

Professor: Zevensuy Rodriguez

Office: Vorhees 411A

Email: zrodriguez@citytech.cuny.edu

Office Hour(s): M/W 11:15 - 12pm

Class Meeting Time:

Monday/Wednesday, 12pm-1:40, Vorhees 314

Course Description:

In this course students will spend the semester designing and building a prototype. The class is broken up to 3 sections: 3D Design and Production, Electronics, and PCB design. In the 3D Design section, students will be introduced to fabrication and modeling using 123D Design and Inkscape. They will fabricate their designs using laser cutters and 3D Printers. In the next section, we will be using PIC microcontroller to add interaction to our prototypes. Finally, we will transfer our circuits from our breadboard to a PCB. We will use the EagleCAM software to design our board, which we will then get printed. At the end of the semester students will have produce a full working prototype with an enclosure, functioning electronics, and assembled PCB board.

Grades:

Your grade will be determined as follows:

Modules(3)	75%
Final Project	15%
Attendance	10%

Learning Outcomes

After taking this class, the student will be able to...	This will be demonstrated by...
Able to create fully functioning prototype	Completion of the 3 Modules
Learn the iterative design process	Presentations in class and peer review
Understand how different physical components fit together	Build an sealed enclosure

Understand the basics of programming PIC micro-controller	Making an interactive circuit during the electronics modules
Able to design a PCB circuit board	Print and assemble your board

Required Texts And Materials:

There are no required texts.

Recommended Texts And Materials:

Attendance Policy:

Attendance is required for all classes. If you have a legitimate reason for missing a class/assignment or if you will be late, you must contact me (see above) before class begins. It is City Tech policy that if you have three unexcused absences, you will fail the class. More than 3 absences will result in an "F" (Failure). TWO LATE ARRIVALS = ONE ABSENCE. If a student misses a class session, it is the student's responsibility to make up any work missed.

Make-ups

If a student finds he or she will not be able to present or hand in a project on the scheduled day, it is the student's responsibility to notify the instructor PRIOR to that due date.

Event Attendance Policy (Departmental Policy)

If you are going to work in our Industry, it is as important to be an educated and engaged audience member as it is to have a clear understanding of what happens behind the scenes. Also, when your peers and/or faculty are working hard on an event for the department, they should be rewarded with your strong support and encouragement, even though you may have had nothing to do with that project. There is nothing worse, after working a "zillion" hours, to have a small audience.

Therefore, as part of completion of this course you will be REQUIRED to attend at least one of the department's and events. Please come and show your support as often as you can!

This will be demonstrated by the writing of one 500-word report on any departmental event. The report should focus on one of the principles of interaction that we discussed in the first several weeks of class. You must clearly identify this principle, cite an example from the text, and organize your report around it.

Academic Integrity Policy (College 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 catalog.