# Digital Media Technology

# Associate of Applied Science Degree in Digital Media Technology

This Associate of Applied Science degree is designed to prepare students to enter the field of multimedia technology – digital media, computer animation, game design, digital video/audio production, web design, and multimedia for the web. Specialized classes using industry-standard software and hardware prepare students for careers in multimedia design, development, and delivery. Technical emphasis courses afford students an opportunity to explore disciplines of interest to them such as game design, broadcasting, graphic design, journalism, music, photography, web development, and mobile app design.

For more information, visit the Department of Information Technologies (http://www.ccm.edu/academics/divdep/bmet/department-of-information-technologies/) website.

# **Degrees**

Associate in Applied Science Degree

Technology-based courses taken by a student at least seven years prior to the time the student applies for graduation may not be applied to a degree or certificate within the Department of Information Technologies.

- AAS Digital Media Technology Track 1 Broadcasting
- · AAS Digital Media Technology Track 2 Game Design
- AAS Digital Media Technology Track 3 Graphic Design
- AAS Digital Media Technology Track 4 Journalism
- AAS Digital Media Technology Track 5 Music
- AAS Digital Media Technology Track 6 Photography
- AAS Digital Media Technology Track 7 Web Development
- AAS Digital Media Technology Track 8 Social Media Marketing

# AAS Digital Media Technology

(P3530)

### **General Education Foundation**

Communication		6
ENG-111	English Composition I	
ENG-112	English Composition II	
Math-Science-T	echnology	4
Mathematics	Elective	
Choose from only	General Education list (Mathematics) 4-credit	
Social Science	or Humanities	3
Choose from Humanities)	General Education list (Social Science or	
General Educat	tion Electives	
Social Science	or Humanities Elective	6

<b>Total Credits</b>		60
Digital Media Te	echnology Core Credits	37
Technical Track	s	6
MED-220	Animation	3
or CMP-250	Game Production	
MED-213	Multimedia Authoring and Design	3
MED-210	Digital Video Editing	3
MED-119	Digital Media Production	3
COM-114	Media Aesthetics	3
MED-113	Multimedia II	3
CMP-263	Web Development Workflow	4
MED-110	Multimedia I	3
CMP-244	Web Design II	3
CMP-239	The Internet and Web Page Design	3
Digital Media T	echnology Core	
General Educati	on Foundation Credits	23
Choose from	General Education list (Science)	
Lab Science Elective		
Choose from Humanities)	General Education list (Social Science or	

### **Technical Tracks**

Broadcasting		
COM-211	Television Production I	
COM-212	Television Production II	
Game Design		
CMP-108	Game Design Concepts	
MED-240	Advanced Animation	
Graphic Design		
GRD-108	Computer Graphics for Designers I	
GRD-118	Typography I	
Journalism		
COM-111	Introduction to Journalism	
COM-209	Editing and Publication Design	
Music		
MUS-112	Introduction to Electronic Music	
MUS-124	Electronic Music II	
Photography		
PHO-115	Photography I ( and Any other PHO class)	
Social Media Ma	arketing	
MKT-113	Principles of Marketing I	
MKT-208	Social Media Marketing	
Web Developme	ent	
CMP-128	Computer Science I	
CMP-249	Advanced Web Programming	
Technical Track	s Credits	0

# **Broadcasting**

Along with the Course List in the AAS Digital Media Technology program, students interested in this track should take the following courses.

COM-211	Television Production I	3
COM-212	Television Production II	3

# **Game Design**

Along with the Course List in the AAS Digital Media Technology program, students interested in this track should take the following courses.

CMP-108	Game Design Concepts	3
MED-240	Advanced Animation	3

### **Graphic Design**

Along with the Course List in the AAS Digital Media Technology program, students interested in this track should take the following courses.

GRD-118	Typography I	3
GRD-108	Computer Graphics for Designers I	3

### **Journalism**

Along with the Course List in the AAS Digital Media Technology program, students interested in this track should take the following courses.

COM-111	Introduction to Journalism	3
COM-209	Editing and Publication Design	3

### Music

Along with the Course List in the AAS Digital Media Technology program, students interested in this track should take the following courses.

MUS-112	Introduction to Electronic Music	3
MUS-124	Electronic Music II	3

### **Photography**

Along with the Course List in the AAS Digital Media Technology program, students interested in this track should take the following courses.

PHO-115	Photography I	3
PHO-204	Digital Imaging I	3

# **Web Development**

Along with the Course List in the AAS Digital Media Technology program, students interested in this track should take the following courses.

CMP-128	Computer Science I	3
CMP-249	Advanced Web Programming	3

### **Mobile App Design**

Along with the Course List in the AAS Digital Media Technology program, students interested in this track should take the following courses.

CMP-128	Computer Science I	3
CMP-170		3

# Certificates of Achievement Media Technology

# A Certificate of Achievement within Digital Media Technology

(P0360)

The Certificate of Achievement in Media Technology is a compact collection of courses in media production skills that enables individuals to work effectively in the creative aspects of digital media. The program is flexible so students may concentrate in a particular area of interest or build a broad repertoire of basic production skills. It is intended for working professionals who wish to gain or enhance skills needed to find employment or advance their careers in media-related occupations including advertising, broadcasting, marketing, multimedia development, public relations and training.

MED-1	10	Multimedia I	3
MED-1	19	Digital Media Production	3
Restric	ted Electi	ives <sup>1</sup>	9
Sele	ct three o	of the following:	
MED	D-113	Multimedia II	
MED	D-210	Digital Video Editing	
MED	D-220	Animation	
MED	0-240	Advanced Animation	
MED	)-292	Special Topics in Media	
0	r MED-29	3Special Topics in Media	
CON	Л-114	Media Aesthetics	
CON	<b>Л-120</b>	Broadcast Journalism	
CON	Л-211	Television Production I	
CON	Л-212	Television Production II	
CMF	P-108	Game Design Concepts	
CMF	P-239	The Internet and Web Page Design	
MUS	S-112	Introduction to Electronic Music	
CMF	P-263	Web Development Workflow	
MUS	S-165	Introduction to Music Recording	
PHC	)-115	Photography I	
PHC	)-204	Digital Imaging I	
Total C	redits		15

Students should consult their academic advisors when selecting these courses.

# **Web Development**

# A Certificate of Achievement within Digital Media Technology

(P0352)

The Certificate in Web Development has been designed to provide an understanding of creating Web pages using basic and advance Hypertext Markup Language (HTML) concepts. An introduction to JAVA applets, JavaScript, and some basic programming concepts. Basic skills in a variety of Internet specialties such as: Internet Protocols, Internet Addressing, and Internet Naming Schemes. Basic training in configuring and utilizing email, FTP, News, and browser software. Perl scripting will be utilized to retrieve and search data as well as to access live databases. (DBWeb). Basic applications using the leading Web development languages and standards. An understanding of how to use advanced graphic techniques to create visually attractive graphics and advanced design techniques to create navigationally sound Web pages. A program for individuals who are interested in augmenting their current skills, or those interested in a career change. Articulation with the Information Technologies degree programs for those students wishing to continue toward an Associates Degree. Recruitment tool to attract non-traditional students to the College and the Information Technologies Department. Current web page development training for the college community.

CMP-239	The Internet and Web Page Design	3
CMP-244	Web Design II	3
CMP-263	Web Development Workflow	4
Restricted Elec	tives <sup>1</sup>	6
Select two courses from the following list:		
CMP-120	Foundations of Information Security	
CMP-128	Computer Science I	
CMP-170	Mobile App Design	
CMP-205	Database Programming (MS Access)	
CMP-249	Advanced Web Programming	
MED-110	Multimedia I	
MED-113	Multimedia II	
MED-119	Digital Media Production	
MED-220	Animation	
MED-240	Advanced Animation	

Students should consult their academic advisors when selecting these courses.

# **Faculty**

**Total Credits** 

Colleen Bamford

Chairperson, Associate Professor, Information Technologies M.S., Nova Southeastern University B.S., SUNY College at Brockport EH 227 973-328-5669 <a href="mailto:cbamford@ccm.edu">cbamford@ccm.edu</a>

Nancy Binowski

Professor, Information Technologies

M.S., Courant Institute of Mathematics, New York University B.A., Rutgers University

EH 225 973-328-5775 <u>nbinowski@ccm.edu</u>

Colleen Carmeli

Assistant Professor, Information Technologies
M.S., Stern School of Business, New York University
B.A Hofstra University

EH 201 973-328-5773 ccarmeli@ccm.edu (CCarmeli@ccm.edu)

Hart Coven

Instructor, Information Technologies

M.S., Northeastern University

B.S., Lafayette College

CH 276 973-328-5788 hcoven@ccm.edu (HCoven@ccm.edu)

#### Al Flbanna

Associate Professor, Information Technologies

M.S., American Military University

B.A., American Military University

EH 221 973-328-5799 aelbanna@ccm.edu

#### Amjed Hedhli

Assistant Professor, Information Technologies M.S., New Jersey Institute of Technology B.S., New Jersey Institute of Technology

CH 276 973-328-5289 ahedhli@ccm.edu (Ahedhli@ccm.edu)

#### Dawn Rywalt

Professor, Information Technologies
M.S., Stevens Institute of Technology
B.S., Stevens Institute of Technology
EH 201 973-328-5783 <a href="mailto:drywalt@ccm.edu">drywalt@ccm.edu</a>

### Vickram Sawh

Assistant Professor, Information Technologies M.S., New Jersey Institute of Technology B.S., Jersey City State College EH 201 973-328-5772 <a href="mailto:ysawh@ccm.edu">ysawh@ccm.edu</a>

Michael Sidaras-Tirrito

Associate Professor, Information Technologies

M.S., Pace University

B.S., Pace University

EH 221 973-328-5793 mtirrito@ccm.edu

### Courses

### MED-110. Multimedia I. 3 Credits.

LECT 45 hrs

16

Multimedia I is a survey course designed to allow students to explore, discuss, develop and use multimedia technology. This computer-based course offers an extensive overview of the technologies of multimedia. Students engage in issues related to usability, management and distribution. Topics include multimedia development and design, media elements, and emerging hardware and software trends. Several projects throughout the course give students hands-on experience with a variety of digital multimedia tools.

Additional Fees: Course fee applies.

### MED-113. Multimedia II. 3 Credits.

LECT 45 hrs

An advanced course designed to allow students to apply the theory and basic practical knowledge presented in Multimedia I. Students apply their knowledge productions for DVD, local networks or the Internet. Students incorporate traditional media production elements such as video and audio combined with the latest features and technologies. Conceptualization, user interface design and prototyping are key course elements. A multimedia prototype project that demonstrates conceptual and technical understanding is required.

Prerequisites: MED-110

Additional Fees: Course fee applies.

### MED-119. Digital Media Production. 3 Credits.

LECT 45 hrs

This course provides students with theory and training in the area of digital content development for digital media productions. Software and hardware training in digital video, audio, animation, and graphics are introduced. In addition, the appropriate use of these areas of content in developing digital media productions and interface design are discussed.

Additional Fees: Course fee applies.

### MED-210. Digital Video Editing. 3 Credits.

LECT 30 hrs LAB 30 hrs

This course provides students with the fundamental principles of video editing with a focus on the techniques and technology used to achieve a superior final product. An in-depth exploration of non-linear editing concepts includes a deeper understanding of primary, secondary and tertiary motion, shot types, sequencing, transitions and continuity. Students learn to log and capture raw video, assemble shots on a timeline, create, add, and edit text, audio tracks, title animation, effects, transitions, continuity and video compositing. This course is ideal for students who wish to create and edit a professional video for broadcast, webcast and other motion media venues.

**Prerequisites:** MED-113 or COM-211 **Additional Fees:** Course fee applies.

### MED-213. Multimedia Authoring and Design. 3 Credits.

LECT 45 hrs

Using industry-standard authoring software, students apply multimedia technology to assemble a real-world interactive multimedia project. Concepts and principles of user interface design, digital audio and video production, team production techniques and usability testing are employed. As members of a production team, students plan, manage and implement a complex multimedia production project.

Prerequisites: MED-113

Additional Fees: Course fee applies. MED-220. Animation. 3 Credits.

LECT 45 hrs

This is an introductory course in 3D modeling and animation software to create animated imagery for video and multimedia applications. Software includes 3D Studio Max (3D animation) and Adobe Premiere and AfterEffects (digital video). Through assigned projects, students learn to combine live video and animation with compositing and bluescreening techniques.

Additional Fees: Course fee applies.

### MED-240. Advanced Animation. 3 Credits.

LECT 45 hrs

This advanced-level course is a continuation of MED-220 Animation and is designed to expose students to high-end 3-D modeling tools for digital animation, electronic post-production, digital special effects and digital multimedia. This course explores advanced applications in digital compositing, particle systems, Newtonian algorithms, kinemation, dynamation and 3-D characters.

Prerequisites: MED-220

Additional Fees: Course fee applies.

### MED-292. Special Topics in Media. 3 Credits.

LECT 45 hrs

An examination of selected topics or issues in media. Topics may differ each time the course(s) is/are offered. Students should consult the department chair for further information. Available only to Digital Media Technology majors.

Prerequisites: Permission of department chair

Additional Fees: Course fee applies.