

## DIGITAL MEDIA

First offered in Fall 2013

### CURRICULUM

#### Master of Digital Media

##### DEGREE REQUIREMENTS

	Credits
Major Research Project/Paper	Milestone
DG8001 Foundations of Digital Media	1
DG8002 Digital Media Environments	1
DG8003 Interaction Design Digital Media	1
DG8004 Digital Media Entrepreneurship	1
DG8005 Interpersonal Communication	1
DG8011 Collaborative Workshop Research Design	Pass/Fail
DG8012 MRP in Digital Media	Pass/Fail
2 electives	2

##### ELECTIVES

	Credits
DG8008 Business and Mgnt. in Digital Media Industry	1
DG8009 Directed Studies	1
DG8010 Selected Topics in Digital Media	1
DG8111 Digital Publishing	1
DG8112 Physical Computing	1
DG8113 Field Placement	1
DG8114 Human-Robot Interaction	1
DG8115 Themed Entertainment Design and Technology	1
DG8116 Zone Learning Project I	1
DG8301 Funding New Ventures	1
DG8302 Creating a Business Plan	1
DG8306 Digital Project Lab	1

### COURSE LISTING

#### Major Research Project/Paper

This 6 month long project will provide students with the team-based opportunity to focus on a major project over the course of one-and-a-half semesters. Students following the Industrial Focus stream will pursue industry relevant projects. Students following the Entrepreneurial Focus stream will work on a project that has the potential to become a commercial product or a service, and that could lead to the development of a standalone company. Those students following the Art/Design stream will work on projects with that particular focus. A written project document will also be a required outcome of this course. Prerequisite: Successful completion of Collaborative Workshop. This is a Milestone.

#### DG8001 Foundations of Digital Media

Business, technological, social, legal and ethical issues and the many forms of digital entertainment are introduced and framed. The emergence and ongoing development of the digital entertainment industry is discussed through a historical exploration and critical analysis of the economics, technical innovations, social demands and ethical constraints that define it. There is a focus on the range of careers and professional opportunities in this rapidly expanding sector. Outcomes are exploration and a critical perspective on digital entertainment and other fields of digital media such as health, education, advertising, and social media. This exploration will act as a common basis for all subsequent discussion and collaboration between students with artistic, technical or interdisciplinary backgrounds. 1 Credit

#### DG8002 Digital Media Environments

This production-oriented course provides an introduction to the landscape of digital media environments, the audiences they serve, and the platforms through which they are typically delivered. The course then introduces regulations and standards, interaction design and production skills, an exploration of the project development cycle, project management, project evaluation and user testing. Concept design of websites, computer games, and other networked, ambient screen-based and non-screen-based displays, and or mobile applications or appliances, including the general concept of "the internet of things", are explored through a series of brief, hands-on projects. 1 Credit

#### DG8003 Interaction Design Digital Media

This course will introduce students to the fundamental frameworks for the design of popular digital media environments. Specifically, the course will analyze formative elements and strategies adopted in game design, social networking and interactive digital media systems, including interaction design with a variety of devices, platforms and media. Key components explored include user

engagement, immersion, visual narrative, interactive storytelling, performance, user cognition and perception. Students will develop a solid understanding of how these environments work, inclusive of alternative design strategies, how users interact, and what is required to create such environments. Students will perform project work in small teams. 1 Credit

#### **DG8004 Digital Media Entrepreneurship**

This course will help students better understand digital media industry sectors, basic competitive strategies and business models, and the process of considering, planning for and gathering resources to launch an entrepreneurial start-up company in the digital media sector. Students will develop an understanding of activities involved in developing, producing and marketing digital media to consumers, components of a company's market and competitive strategic positioning and business model, elements of a viable business plan for a startup company, and how to communicate elements of the business plan to outside parties for support or for provisioning of resources. Students will perform project work in small teams. 1 Credit

#### **DG8005 Interpersonal Communication**

Digital media professionals need to communicate their ideas clearly and persuasively and work with teams of creative, technical, and business people. Building effective interdisciplinary teams requires skills in improvisation, listening effectively, engaging diverse audiences, and inviting and resolving conflicts. This interactive, workshop-based course focuses on interpersonal communication skills and public speaking. For greater self-awareness and improvement, course speeches are digitally recorded. 1 Credit

#### **DG8008 Business and Mgmt. in Digital Media Industry**

This course gives students an overview of the interrelated factors making up the business environment including ethics, operations, marketing, management, leadership, accounting, human resources, finances and information technology management. In addition, the student learns about past, present and future trends in business. The student develops decision-making and problem-solving skills through case studies, group exercises and presentations. Topics covered also include production, delivery and management of digital media and how games, film and music businesses differ from traditional businesses. 1 Credit

#### **DG8009 Directed Studies**

This course is available to graduate students who wish to gain knowledge in a specific area for which no graduate-level courses are available. The course is taken under the guidance of a faculty member, and students are required to present a formal report, or take a formal examination, at the end of the course. The program of study must be approved by the supervising faculty member and the program director at the beginning of the term of study. 1 Credit

#### **DG8010 Selected Topics in Digital Media**

An in-depth analysis of recent developments and topics of current interest in Digital Media. The topic is selected every year in accordance with industry trends, the interest of students and availability of faculty expertise. The course will focus on strategic and novel topics and concepts in Digital Media which may include, but are not limited to: Ambient and Artificial Intelligence, Social Networking Analysis and Design, Social Media and its Frameworks, Advanced Concepts in 3D Graphics and Visual Effects, Multimedia Syndication and Segmentation and Unified Communications in Multimedia Systems, and Information Security and Privacy. 1 Credit

#### **DG8011 Collaborative Workshop & Research Design**

This course focuses on the fundamental concepts and skills required to successfully manage projects in dynamic, agile, multidisciplinary team environments relevant to digital media. This course also introduces research design and planning as it relates to digital media. The course examines a variety of research methodologies including creative, practice-based research and covers the various components of research from the formulation of research questions to the analysis and interpretation of data. Pass/Fail

#### **DG8012 MRP in Digital Media**

This course focuses on the execution of research for the major research project (MRP). Research methods including creative, practice-based research will be reinforced and executed with the guidance of a supervisor. This course encompasses strategic milestones throughout, concluding with a formal presentation and a comprehensive written major research paper (and project if applicable). Prerequisite: DG8011 Pass/Fail

#### **DG8111 Digital Publishing**

This course will focus on strategic and novel topics and concepts in Digital Media which may include, but are not limited to: Ambient and Artificial Intelligence, Social Networking Analysis and Design, Social Media and its Frameworks, Advanced Concepts in 3D Graphics and Visual Effects, Multimedia Syndication and Segmentation and Unified Communications in Multimedia Systems, and Information Security and Privacy. Antirequisite: LM8910. 1 Credit

#### **DG8112 Physical Computing**

Using the human body and our senses (vision, acoustic, touch, taste, smell, proprioception – physical sense of self movement) as an organizing model, this course introduces students to Physical Computing practices. Students will learn about digital and analog sensor systems, be introduced to micro-controllers, computer sensor systems and ubiquitous computing. Antirequisite: MP8987. 1 Credit

#### **DG8113 Field Placement**

Field Placements provide opportunities for full time, non-practitioner students to earn academic credit for relevant work experience (paid or unpaid), normally outside the university. They must be related to Digital Media and to the student's learning objectives in the program. Field Placements offer students the opportunity to link theory with practice, to conduct research, to learn about professional practices in organizations in the field of digital media and to gain work experience. 1 Credit.

#### **DG8114 Human-Robot Interaction**

From the first moment a human picked up a stick and attempted to knock down some food from an unreachable location we have attempted to use technology to extend our influence in the world. This course will examine physical systems designed to extend the notion of human presence to remote locations. Topics may include Presence, Telepresence, Tele-robotics and Agency. The course

is designed to provide students with a practical introduction to HRI that will involve the design and construction of working robotic systems designed to interact with remote environments. Prerequisite: CPS607 or permission of the instructor. 1 Credit

**DG8115 Themed Entertainment Design and Technology**

This course provides an intensive overview including the history and evolution of themed environments and attractions, design objectives and approaches, industry structure and professional spectrum, and innovation framework. Lectures, seminars, readings, tours, guests, and field trip options will be adapted to student interests. Students will explore, develop, and present or demonstrate a topic of interest related to ride, show, or guest experience. 1 Credit

**DG8116 Zone Learning Project I**

This structured experiential learning opportunity allows students to focus on a project within one of Ryerson University's Zones. Students will improve their knowledge through engaged experiential learning while developing their social and collaborative skills. Students will set milestones with the instructor based on their personal interests and project needs, meet regularly to determine progress and adjustments, discuss relevant theories and methodologies in class, and share accountability-rep. 1 Credit

**DG8301 Funding New Ventures**

Entrepreneurial finance is concerned with financial decisions of entrepreneurs and entrepreneurial firms, capital structure decision-making and governance issues in high-risk environments, and the ways to exit venture investments. The rapid development of private equity and venture capital industries, and the general emphasis of entrepreneurship as a central driver of economic prosperity, has given rise to a set of questions that are different from the questions posed in the context of large firms with widely diversified investors. This course will address these questions using both explicit-knowledge lectures as well as tacit-knowledge experiential learning. This course is designed for students who are thinking about pursuing a career as an entrepreneur or who envision a career in the private equity, venture capital, or investment banking industries where they will be exposed to deals with small to mid-sized firms. Antirequisite: FIN 510, ENT511. 1 Credit

**DG8302 Creating a Business Plan**

The objective of this course is to have the student become familiar with preparing a professional business plan for a new venture. The preparation of the business plan will be built upon everything that has been learned to date and will require the synthesis of this learning. The course will provide the student with the opportunity to explore and investigate a business venture of interest and the preparation of a business plan will provide an opportunity to apply what has been learned in the business program. The student will also develop an appreciation for the requirements of a successful entrepreneurial venture. Antirequisite: BOC 913, ENT 500, ENT726. 1 Credit.

**DG8306 Digital Project Lab**

This course offers a unique opportunity to build a digital project with a full interdisciplinary team. Students from multiple disciplines/programs form teams to develop functional digital prototypes. Projects will be cutting-edge Mixed Reality work including wearable technology, location- and context-aware computing, socially-connected apps, and novel interaction paradigms. Teams work closely with professors and mentors to learn new production-skills in digital creativity, collaborative work, programming, demo videos, documentation, and presentation skills. Antirequisite: MP8986, CPS630. 1 Credit

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