Proposal for a Digital Media Design and Practice Bachelor of Arts Major at Stockton University

Program Title: Bachelor of Arts in Digital Media Design and Practice

CIP Code:
09.0702 Digital Communication and Media/Multimedia

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1. Program Objectives

Program Overview

This is a proposal to establish a bachelor of arts degree in Digital Media Design and Practice (DIGI) at Stockton University. The program is within the University's mission as a master's level institution.

Digital media includes graphic images, text, video, audio, computer programming, and websites. With the rapid growth of mobile devices, social networking sites, and other electronic devices (Fitbit, Apple watch, etc.), much new digital media content, including apps, is needed and being designed and developed. Today, digital technology is ubiquitous; it has rendered our society multidimensional, media-saturated, and fast-paced; it affects how we study, work, communicate and collaborate.

This new digital content not only integrates all aspects of digital media, but also requires critical thinking, and communication and collaboration skills. The proposed program provides a practitioner-based curriculum by focusing on multiple synchronized courses that produce well-rounded graduates who are prepared to excel in every aspect of media and emerging technology and meet global demands.

DIGI coursework covers a wide range of courses to develop aesthetic, technical, and critical thinking skills. In addition, coursework covers systematic design principles. As will be shown later, this practitioner-based, comprehensive curriculum is distinct from other existing academic programs at Stockton and fills an emerging curricular niche.

Conceptual Framework

This technological revolution has led to drastic job-market changes. At the 2016 The Organization for Economic Co-operation and Development (OECD) meeting, panelists discussed new markets and new jobs in the digital economy. They emphasized that digital society is creating new job opportunities in new markets and existing industries, and organizations including academia need to meet these challenges. (https://www.oecd.org/internet/ministerial/meeting/New-Markets-and-New-Jobs-discussion-paper.pdf)

According to a June, 2018 report release by the Brookings Institution (https://www.brookings.edu/blog/the-avenue/2018/06/27/highly-digital-jobs-are-less-likely-to-be-automated/),

"In sum, workers with superior digital skills tend not only to earn higher wages, but they also appear less exposed to automation-driven displacement."

These changes in employment dictate new skill sets for employees. In 2017, the National Association of Colleges and Employers (NACE) (http://www.naceweb.org/career-readiness/competencies/career-readiness-defined/) identified eight key competencies associated with career readiness. These competencies are:

1. Critical Thinking/Problem Solving
2. Oral/Written Communications

3. Teamwork/Collaboration
4. Digital Technology
5. Leadership
6. Professionalism/Work Ethics
7. Career Management
8. Global/Intercultural Fluency

All of these competencies, especially 1, 3, 4, and 8 will be addressed in this program.

Many universities worldwide already have majors dealing with digital technology/media. However, as will be shown later, there are only a few relevant programs or majors in universities in the geographic area.

Mission and Goals

The mission of the DIGI program is to provide a learning environment through which students design, develop, and implement digital media informed by relevant theories, combining textual, visual, and audio components with technical skill to produce professional multimedia assets. In order to carry out this mission, the DIGI program has four main goals:

Program Goal 1: Prepare students to excel in the field of digital media design and practice, such as web and media development.

Program Goal 2: Provide students with collaborative skills needed to work in a multidisciplinary environment.

Program Goal 3: Equip students to solve real-world problems through digital technologies.

Program Goal 4: Enable students to thrive in a fast-changing, diverse, global, digital environment.

2. Evaluation and Learning Outcomes Assessment Plan

In order to achieve these four program goals, the DIGI program will address a wide variety of relevant student learning goals and outcomes, which will be assessed at various points in the curriculum, through both direct and indirect measures. In addition, the program addresses most of Stockton's Essential Learning Outcomes (ELOs).

Program Goals, Student Learning Goals, Curriculum Map, and Assessment Plan

Program Goals	Connections to Stockton's ELOs	Student Learning Goals	Students Learning Outcomes	Courses or Other Points in the Curriculum Where Outcomes are Assessed	Assessment Methods or Tools
Program Goal 1: Prepare students to excel in the field of digital media design and practice, such as web and media development.	➢ Communication Skills ➢ Creativity and Innovation ➢ Critical thinking ➢ Information Literacy and Research Skills ➢ Program Competence	1.1. Ability to explore digital media critically 1.2. Ability to apply critical thinking skills, such as logical thinking, analytical thinking, and creative thinking, to digital media design 1.3 Ability to apply technical skills, such as graphic design, coding, audio and video production, writing for multimedia, and data analysis, to	1.1.1. Identify relevant media based on specifications 1.1.2. Evaluate digital media using design vocabulary and based on design principles 1.1.3. Articulate the social, historical, and aesthetic contexts of digital media 1.1.4. Identify the strengths and weaknesses of digital media 1.2.1. Conduct a needs analysis for a specific digital media project 1.2.2. Develop a list of specifications based on a needs analysis 1.2.3. Implement creative and critical problem-solving strategies when designing and developing digital media 1.2.4. Effectively apply relevant theories, practices, and principles when designing and developing digital media 1.3.1. Design, develop, and manage digital media using current and emerging technologies that adhere to industry standards 1.3.2. Design and develop digital, interactive, and web-based media to meet customer requirements and usability standards	DIGI XXXX Introduction to Digital Media Design and Practice DIGI XXXX Digital Design Theory and Principles DIGI XXXX Digital Media Capstone	Indirect Measures: Course grades Direct Measures: Rubrics based portfolio review: evaluation is based on conceptual development, originality, visual principle application, ease of use/navigation of the end-product, ability to articulate own work, ability to critique other's work.

		digital media design			
Program Goal 2: Provide students with collaborative skills needed to work in a multidisciplinary environment.	➢ Adapting to Change ➢ Communication Skills ➢ Program Competence ➢ Teamwork and Collaboration	2.1. Ability to apply teamwork skills, such as collaboration, communication, project management, and ethics , to digital media design	2.1.1. Contribute responsibly to a team project (e.g., participate at meetings, complete assignments on time) 2.1.2.Summarize accurately and thoroughly the discussions of a team meeting 2.1.3.Evaluate the effectiveness of a team activity using a provided rubric 2.1.4.Coordinate effectively a team project using relevant management principles 2.1.5.Demonstrate awareness of cultural contexts within which media is developed and consumed	DIGI XXXX Introduction to Digital Media Design and Practice DIGI XXXX Digital Media Capstone	Same as the Program Goal 1 methods
Program Goal 3: Equip students to solve real-world problems through digital technologies.	➢ Creativity and Innovation ➢ Critical Thinking ➢ Information Literacy and Research skill ➢ Program Competence ➢ Quantitative Reasoning ➢ Teamwork and Collaboration	3.1. Ability to solve real-world problems using digital technologies.	3.1.1. Identify a real-world problem to solve 3.1.2.Develop needs analysis 3.1.3.Identify right technology tools	DIGI XXXX Introduction to Digital Media Design and Practice DIGI XXXX Digital Design Theory and Principles DIGI XXXX Issues in Digital Media Design and Practice DIGI XXXX Digital Media Capstone Introductory Statistics Course	Same as the Program Goal 1 methods

Program Goal 4: Enable students to thrive in a fast-changing, diverse, global, digital environment.	➢ Adapting to Change ➢ Communication Skills ➢ Critical Thinking ➢ Ethical Reasoning ➢ Global Awareness ➢ Program Competence	4.1. Ability to recognize and value diverse cultures and different perspectives in order to communicate with all people respectfully via digital media	4.1.1. Demonstrate openness, inclusiveness, and sensitivity to all people.	DIGI XXXX Introduction to Digital Media Design and Practice DIGI XXXX Issues in Digital Media Design and Practice DIGI XXXX Digital Media Capstone	Same as the Program Goal 1 methods

In addition, we recognize the need for long-range assessment. The table below includes an outline of the proposed plan.

Long-term Assessment Plan

Assessment Tool	Targeted Audience	Purpose	Timetable
Alumni survey	Recent graduates	Gain feedback on value of curriculum	Begin one year after first graduating class
Enrollment/completion rates	Current students and recent graduates	Determine student progress through program	Current students; begin two years after program inception Recent graduates: begin one year after first graduating class
Job placement data	Recent graduates	Assess ability of program to prepare students for jobs in the field.	Begin one year after first graduating class
Student Demographics	Current students	Examine demographic patterns	Begin two years after program inception

3. Relationship of the program to the institutional strategic plan and its effect on other programs at the same institution

(a) How this program fits with the Institutional Strategic Plan:

In alignment with Stockton's mission and interdisciplinary underpinnings, the proposed program aims to expose students to many related disciplines while enabling intensive investigation of digital media and technologies to prepare them for a wide variety of professional careers. To achieve this, the proposed program relates to Stockton's institutional strategic plan, known as "Stockton 2020," and addresses three of the four themes: Learning, Engagement, Global Perspectives, and Sustainability:

Learning: The educational goals of the DIGI curriculum emphasize breadth, as well as depth. The students will be required to take courses from allied disciplines including, but not limited to Communications, Computer Information Systems, Marketing, and Visual Arts, thereby enabling them experience interdisciplinary background of Stockton, and providing them appropriate level of breadth. Focus and depth are added through specialized DIGI courses.

Engagement,
In alignment with Stockton's mission of imparting liberal arts education, we aim to enable high levels of student-teacher interaction both inside and outside the classrooms using innovative instructional methods and technological resources to interact with our students. Internships and capstone projects will allow our students to experience possible career opportunities, and be able to cohesively apply knowledge and skills gained through the curriculum

Global perspective
One of the missions of the DIGI program is to build a global perspective in developing digital media and promote future advocates who will cultivate an innovative in diverse digital cultures. Students in the DIGI curriculum will learn and apply various skills, such as communication etiquette as a global citizen, and intellectual property understanding in international trades/marketing. As shown in the table on pages 3 and 4, "Program Goals, Student Learning Goals, Curriculum Map, and Assessment Plan," at least three DIGI courses will address this issue.

(b) How this program differs from existing programs/tracks:

The focus of our proposed program is to prepare professionals in the field of digital media and technologies. Our goal is to fulfil the student's expectation of digital media mastery with the right assignment, design, and adequate time for engagement that is comprehensible to the outside world and related to professional practice. The proposed program serves a different audience from those served by Visual Arts, Communication, Computer Information Systems, or Computer Science. The flexibility afforded by this curriculum prepares DIGI students to become digital generalists. We solicited and received feedback on potentially impacted programs in Arts and Humanities, Business, and General Studies, and made modifications to the proposal based on faculty comments and suggestions.

DIGI committee members asked ARTV and COMM faculty for their feedback at the beginning of Fall 2018 semester. While the majority of the COMM program faculty expressed their support

for this new program, some valid concerns were raised by some members of the ARTV program. As a result, the DIGI committee made several changes and clarifications, reflected in this proposal. Two major concerns follow.

First, some ARTV program members were concerned that the earlier draft did not clearly define the student audience that would be best served by the DIGI program, and how this audience differed from those majoring in existing programs. We now argue that the emphasis of DIGI is different from that of other extant programs.

It is true that various programs at Stockton, including Literature, Visual Arts, Communication, recognize the importance of the role of Digital Media Technologies in their curriculum. However, while these programs focus on theory and technique of their respective disciplines, they have only a few courses related to digital media and which explore the applicability/relatability of digital media techniques to these disciplines. In contrast, the proposed DIGI program focuses on digital media and practice while integrating a course or two from each of its allied disciplines in its curriculum, based on the applicability/relatability of these courses to digital media, as shown below in this partial list of required courses: CSIS (2) ARTV (2); MKTG (1); COMM (2); DIGI (4)

In 5 Ways Digital Technology Is Changing Your Job, published in *Forbes*, the author stated, along with new skills, “You will get to know adjacent roles. The rise of digital doesn't just mean changes in job descriptions, it also means a blurring of roles. As you explore and learn digital competency in your own field, you will be developing solutions that touch upon other roles. For example, the roles of software developers and designers, once part of two distinct disciplines, are increasingly overlapping.” (https://www.forbes.com/sites/joemckendrick/2016/12/29/5-ways-digital-technology-is-changing-your-job/#6359dd0964bd)
As will be stated later, the DIGI program will provide broad interdisciplinary knowledge and skills in digital media areas that will empower undergraduate students to connect and synthesize these blurred roles into a cohesive whole.

Second, some ARTV program members expressed the concern that instituting a DIGI program would have negative impact on visual arts track enrollments, especially, visual communication, illustration, and interdisciplinary visual arts. We agree that the DIGI major may draw a small number of majors from other programs. However, enrollments in other programs should not decline for two reasons. First, we expect that a new, DIGI program will fill a niche that will attract new students who would not have applied to Stockton previously. Second, courses in ARTV, BSNS, MKTG, COMM, and CSIS will serve as required cognates for the DIGI major. So, any decline in enrollments in these programs due to the loss of majors should be compensated for through increased enrollment of DIGI majors. Also, a student pursuing a Graphic Design concentration in the Visual Arts program would benefit from taking DIGI courses as their at-some-distance electives to develop their competency in advanced web development, and game design.

We expect that certain DIGI courses will provide support to Stockton’s Digital Humanities Center, whose reopening is being planned by faculty within ARHU. According to Stockton’s website, “The Digital Humanities at Stockton (DH@Stockton) is designed to facilitate participation in the emerging field of digital humanities by increasing awareness and visibility of how Stockton community members are currently utilizing digital media, as well as encouraging and assisting the development of innovative digital materials.” We envision DIGI faculty members and advanced DIGI students helping to develop and assist students working in a re-envisioned Digital Humanities Center in the development of humanities-based digital material. DIGI will be a service asset to the institution, and will function as a bridge to existing programs.

Since students in the DIGI program will also be taking some courses from allied disciplines, it will not only enhance their inter-disciplinary underpinnings, but also permit an opportunity to pursue minors -- possibly in Visual Arts, Digital Literacy and Multimedia Design, or the digital storytelling minor soon to be proposed within the Communication program -- or dual majors.

An examination of the curriculum and goals of the existing Digital Literacy and Multimedia Design minor revealed significant overlap with the proposed DIGI program. Therefore, we recommend that this minor be subsumed by the DIGI major. The developer and past coordinator of the minor, who is a member of the planning committee, argued for this idea, because housing a minor under a major would improve stability and possibly increase student demand and course offerings. The current Digital Literacy and Multimedia Design minor coordinator, having reviewed the proposal, has fully supported the plan, as evidenced in his emailed statement, “I am writing to offer my support for the new proposed degree program in digital media design and practice. I feel that this degree program will be another asset to our students and wish you success in establishing it at Stockton University.”

In addition, we consulted the coordinators of other potentially impacted majors and minors, Computer Science and Computer Information Systems, and the coordinators fully supported the DIGI program plan. The Computer Science coordinator wrote in an email, “I offer my support on behalf of the CSCI program for the proposed B.A. in Digital Media Design and Practice. There is no redundancy between this new program and the B.S. in Computer Science or with the Minor in Computer Science.” Similarly, we received the following emailed support from the Computer and Information System coordinator, “The Computer Information Systems (CIS) Program appreciate Prof. Lee and colleagues for their work on proposing a new major - Bachelor of Arts in Digital Media Design and Practice, and strongly support our colleagues in this endeavor.”

Feedback from the School of General Studies will be reported in the next section.

4. Justification of the need for this program

Housing the DIGI Program

While examining about 50 institutions offering similar programs in the USA (see Appendix F), we noticed that the most common word describing these programs was ”interdisciplinary.” At others institutions, these programs are housed in a wide variety of schools, including interdisciplinary schools. However, the focus of each program depends on where the program is housed, with the most interdisciplinary programs housed in interdisciplinary schools, where such schools exist.

The proposed DIGI program is inherently multidisciplinary and interdisciplinary. The program will provide course work in Visual Arts, Communication, Computer Information Systems and Business, along with interdisciplinary, DIGI-acronym courses. The School of General Studies at Stockton University is defined as “the place where students and faculty with various specializations explore the world of knowledge, ideas, and issues, often in an interdisciplinary way.” Based on this definition, we believe the School of General Studies is the ideal place for the DIGI degree.

In December, 2018, a member of the planning committee distributed a draft document to General Studies faculty and teaching staff and asked for reactions. Nine individuals responded. The responses were very positive, indicating that the proposed program would represent an exciting addition to Stockton's curriculum and would appeal to a large number of students. One teaching staff member suggested that the School of General Studies would be a good fit for the new program. Another questioned whether the addition of any new program into General Studies might impact negatively on the efforts of existing programs to acquire resources. Replies by other members appeared to allay that concern. One faculty member emphasized the value of including a Creativity Lab in the proposal; another questioned where the Lab would be housed. One faculty member emphasized the importance of including an internship program, based on his experiences at another institution. Another recommended that we consider increasing the theoretical aspects of the proposed curriculum in order to provide balance with its practical focus. Three individuals indicated their interest in teaching courses in support of DIGI, if the program were approved.

Regarding administrative support, in conversations with the Deans of Arts and Humanities and General Studies, they gave their support for housing the program in General Studies. They agreed that this decision would resonate with Stockton's distinctive approach to general education.

The Liberal Arts & the DIGI Degree

The DIGI degree is generated from the intersection of three disciplines: digital communication studies, digital visual arts and computer information systems. The curriculum is crafted for students with interest in these areas. Stockton University's college-wide curricular requirements ensure that students will have a sound basis in a range of liberal arts disciplines and skills. Therefore, students graduating with a DIGI degree, while they may enter certain obvious professions, will be well placed to use their digital skills in a wide range of professions in a rapidly evolving field.

If this program is approved, the earliest possible date of implementation would be 2020. This implies that 2024 would be the earliest graduating class among entering first-year students. Considering the phenomenal growth rate of digital technology, many job opportunities in this field do not even exist today. We should be preparing students for these jobs by training digital generalists and equipping them with the broadly based skills enumerated on page 2 of this proposal. These skills, in combination with the introductory skills the program will provide in visual arts, communications, computer information systems, and business will serve our students well in this rapidly changing environment.

Digital media continues to create demand for new jobs, such as creative developer, multimedia specialist, digital media/social media coordinator, digital marketing specialist, media relations professional, use experience designer, e-learning instructional designer, digital media designer, digital advertising designer/analyst, and web developer. As stated earlier, most of these positions require comprehensive understanding of digital media and a variety of skills, as opposed to a specialized skill such as programming. For example, these quotes describe requirements from actual hiring websites.

User Experience Designer

> a multi-talented **jack-of-all-trades** who possesses knowledge in the areas of psychology, design and technology.

E-learning instructional designer

Strong Microsoft Office suite user, Technologically savvy, Excellent writing and editing skills, Graphics familiarity, Willing to learn on the job, Video or podcast experience preferred, Social media familiarity and interest, Collaborative, curious personality

Digital Media Specialist

Must have a true thirst to understand technology and strategy, while exceling in data quantifying

The curriculum proposed here is based, partly, on curricula at institutions that offer similar, digital generalist degrees. As the program evolves, we expect that the curriculum will respond to ongoing changes in the field. Moreover, as the program matures and faculty members are able to establish relationships with partner institutions, we anticipate that service learning and internship options will be developed and added to the curriculum in order to provide students with relevant work experience.

As of spring 2018, the number of students currently majoring in Communication Studies (242), Visual Arts (138, including 54 in the Visual Communications track, 21 in the Interdisciplinary studio arts, and 19 in the Illustration track) and Computer Science & Information Systems (361) at Stockton is one way to suggest the pool student interest. The results of our student survey, discussed below, also suggest that a significant level of interest exists in this area of studies.

Professional and Career Opportunities

The market analysis for a degree in Digital Media Design and Practice, completed for Stockton by Hanover Research (See Appendix A) lists several DIGI related positions available to graduates, including web developers, multimedia artists and animators, and, under a broad category, media communication workers. To this list we would add game/app developers, social media practitioners, digital media programmers, virtual/augmented reality simulators, digital marketing consultants, digital data technologists, technical writers in digital technology, digital content analysts, digital audio operators, and instructional designers, in business, science, medical, and education sectors. Our digital media graduates' strength with regards to their interdisciplinary learning, and practical hands-on-experience will enable them to integrate companies' digital media efforts, create shareable content; determining which platform is best suited for each piece of content, build and manage social media profiles and campaigns, and maintain brand consistency across platforms.

The aggregate digital literacy-related job availability identified by Hanover is promising.

Aggregate digital literacy-related job availability by geographic level

	New Jersey	Mid East	National
Baseline Year Employment	15,770	123,910	773,400
10-Year Projected Employment	16,220	136,940	814,900
Growth Rate	2.9%	10.5%	5.4%
Total Annual Openings	400	3,860	68,600

Figure 1. Total Labor Market, from Hanover Report

The current baseline number for employment in digital-literacy related jobs in New Jersey is a robust 15,770 with total annual openings of 400 and a projected growth rate over ten years at 2.9%. The projected growth rate for the Mideast over the next decade is 10.5%.

While approximately 10% of workers aged 25 and older in digital-literacy related professions across the US report holding associates degrees and a slightly higher percentage hold masters degrees or higher, the great majority of professionals report holding bachelor degrees. The potential for employment in digital-literacy related jobs is strong for well-trained graduates. For example,employment of animators is projected to grow 8 percent from 2016 to 2026, about as fast as the average for all occupations according to the Occupational Outlook Handbook, US Dept. of Labor (https://www.bls.gov/ooh/)

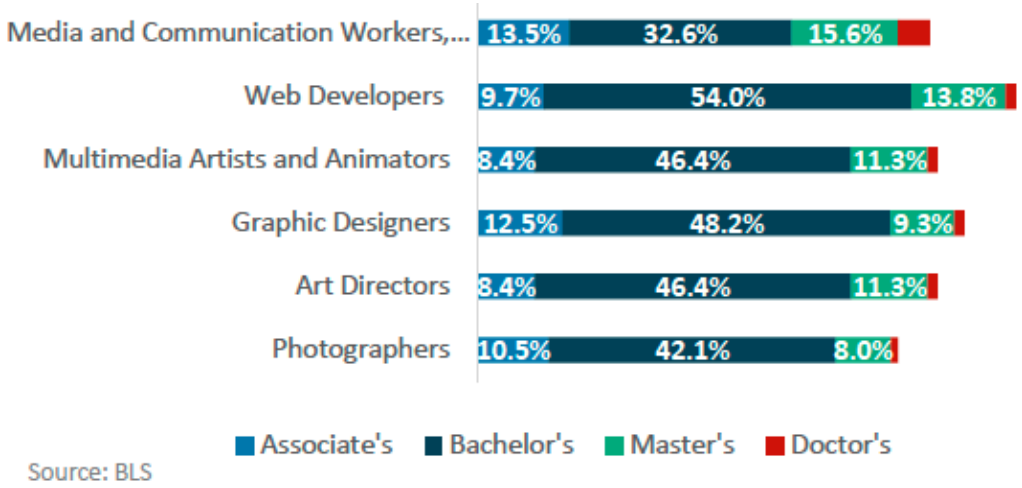

Figure 2. Education Attainment, from Hanover Report

Relationship of Program to Institutional Master Plans and Priorities

Stockton University had identified five strategic priorities. The proposed DIGI and Practice major supports these priorities as described below.

The DIGI major advances the University's mission of excellence in teaching and learning, scholarly and creative activity, and dedication to service. The proposed major focuses institutional efforts toward student success, preparing Stockton's increasingly diverse student body to excel in a rapidly changing digital world (goal 1.1). The program enhances Stockton's offerings in a rapidly changing digital landscape, expanding our footprint in the region (goal 1.2). The program will be dependent upon Stockton's high quality of technological support and will help to translate that excellence to the area community (goal 1.3).

The DIGI major develops the academic, human, and financial resources that support the University's aspiration to be a premier regional educational institution. The proposed major as a coalescence of digital disciplines supports innovation, impact and efficiency within curricular offerings (goal 2.1). The program has been designed keeping in mind the need and ability to assess the effectiveness of its learning practices (goal 2.3). The program demands that its faculty and students remain up-to-date in the ever-changing world of technology (goal 2.9).

The DIGI Major supports human diversity and inclusion in all of its forms and in a manner that serves the needs of our region and recognizes our place in a global society. Digital media, the basis of this major's study, presents unique opportunities and challenges to such diversity (goal 3.1). The program will provide graduates with skills that will help to expand the region's economic development and cultural offerings (goal 3.2).

The DIGI major develops and supports planning and governance processes that are integrative, collaborative, transparent, and sustainable. This program has been developed and proposed under enhanced processes for development of new academic offerings (goal 4.3).

Stockton's guiding principle is *Students first*. As with all other programs designed and implemented at Stockton, DIGI will follow this principle. The interdisciplinary curriculum of DIGI program will provide students with intellectual skills and more specific program skills that will prepare them well for a rapidly changing employment landscape. The courses will equip them with necessary theoretical underpinnings, along with hands-on-practical experiences via class projects and a required capstone course. Elective internship opportunities will equip our students for professional careers in the field.

Comparable Programs in New Jersey and the Neighboring Areas

There are few digital literacy programs within competitive reach of Stockton University. We have identified the following:

SUNY New Paltz
Digital Media & Journalism. This major is one of the largest academic programs at New Paltz. It leans more toward traditional digital journalism and storytelling than our proposed major. It does not appear to require the computer programming or visual arts components that we envision.

Kutztown University
Digital Communication and New Media is a Minor that fits alongside Media Studies in the Communications Department. This minor focuses on both traditional media and new media. Students within this minor *study* various media forms but are not trained to *create* such media as proposed in Stockton's DIGI major.

SUNY Oneonta
The Media Studies major prepares students for careers in the fields of broadcasting, journalism, film, audio production and video production. Students choose between two tracks: Production and Media Studies. The program does not appear to require the computer programming or visual arts components that we contemplate.

Art Institute of Pittsburgh
BS in Game Art & Design. This interesting program duplicates many of the core concepts of the proposed DIGI major, especially in its focus on game design and digital aesthetics. As a Bachelor of Science degree offered at an art institute, the course of study is in greater depth than that contemplated by the proposed Stockton major.

Rutgers Camden
Digital Studies Center (https://digitalstudies.camden.rutgers.edu/)

The Digital Studies Center (DiSC) is an interdisciplinary, collaborative research, development, and education center at Rutgers Camden that helps kick-start, facilitate, support, and promote

projects that are made possible by the convergence of digital technologies with the humanities as well as the arts, natural, and social sciences. The Digital Studies Center presupposes strong practitioners able to tackle digital projects in sophisticated forms. Our DIGI majors, once they have completed their course of studies at Stockton, would be excellent candidates to work in the RC Digital Studies Center.

DS+ Major & Minor (dsplus) is an interdisciplinary program that offers both a joint B.A. and a minor to Rutgers Camden students. The Digital Studies program links disciplines from across Arts and Sciences to digital tools and methods, and the program provides students with an opportunity to understand how the digital is changing how we read, write, think, work, and play. The minor requires 18 credits. While this minor is innovative and we applaud its interdisciplinary nature, its requirements, we believe, will leave students less prepared for a career in digital-literacy related professions than those who complete the proposed Stockton degree.

Fordham
Digital Media and Technology. This program of study is situated with the Gabelli School of Business at Fordham, and states that “In addition to your business coursework, you can take Fordham College classes in computing, visual arts, communication and media studies.” Students can also take advantage of internships at a variety of digital-related companies in New York City. The Stockton proposal includes a business studies requirement, but is avowedly focused on communication, visual arts and computer information systems courses; they are not an afterthought.

5. Projected Student Enrollment

(a) 5 year projection

Based on the regional and national data of the similar degree

2020	2021	2022	2023	2025
20	35	60	75	80

(b) Student interest

During the first two weeks of classes in Fall, 2018, a total of 129 surveys (See Appendix B) were administered in several classes at Stockton: introductory courses in Communications, Visual Arts, Computer Science and Information Systems, a GIS course, and a freshman seminar. The students surveyed are mostly (92.6%) traditional college age (18-23), and about half are male and half are female. When asked if they would be interested in pursuing a major in Digital Media Design and Practice, 27.1% reported that they are interested or very interested, with an additional 40.3% reporting slight interest. Reasons for interest were that the major would expose them to new technologies of interest (47.3%), they would enjoy working in the field (41.1%), and the major would help finding a job (30.2%).Respondents expressed interest in several areas of digital media, especially graphic design (30.2%), app development (19.4%), and game design (18.6%). Further details of the survey results can be found in Appendix C.

Additionally, our recent conversations with high school students also indicate increasing

interest in digital media. This claim is supported by recent Hanover survey data. Having this new program at Stockton will also benefit Visual Arts, Communication, and Computer Information Systems students who will have the option to take DIGI courses as electives to strengthen their portfolio, as stated in Section 3 (b) of this proposal.

(c) Affordability

Many students choose Stockton because they cannot afford the tuition of the digital media programs in more metropolitan areas. In the past, students from reputable art institutes have transferred to Stockton seeking an affordable, local, high quality education. For example, per credit cost at Stockton University is $340.83 (NJ resident) and $615 (non-NJ resident), while per credit rate at Rutgers Camden is $495.25 (NJ resident) and $1,153.00 (non-NJ resident). Other nearby institutions with the similar program offer generally higher tuition rates, as shown below:

- $694.00 (NYS resident) and $944.00 (non-NYS resident) at SUNY New Paltz;
- $312.00 (PA resident) and $780.00 (non-PA resident) at Kutztown University.

It is reasonable to estimate that having a DIGI program at Stockton will help draw these prospective students from the tri-state area.

6. Program Resources

The program would need, in the first year, two **new**, specialized full-time tenure track faculty members in digital media, with the addition of a third, full-time tenure track faculty as the program grows. The vast majority of courses in the proposed curriculum are offered on a regular basis, and preliminary conversations with colleagues in Visual Arts, Communication, and Computer Information Systems suggest that seats will be available in these courses for DIGI majors.

Additional resources will be needed for a “Creativity Lab” for the new program. In addition to the faculty members there would be a dedicated professional staff member to oversee the Creativity Lab. Colleagues in Arts and Humanities who utilize existing labs emphasized that having only part-time supervision has led to problems with security and equipment maintenance. The Creativity Lab would be outfitted per specifications provided (See Appendix D).

The estimated costs, based on current quotations, are as follows:

Computers and furniture (25):	$75,000
Audio/Video Equipment:	$11,000
Total:	$86,000

We have been informed that there is a plan to set up a creative work lab that the Dean of Arts and Humanities and Arts and Humanities faculty are developing. If this plan comes to fruition, students in the proposed DIGI program might be able to take advantage of this facility.

Based on student needs, DIGI will welcome associated faculty from Communication Studies, Computer Science, Computer Information Systems, Visual Arts, Instructional Technology, and General Studies to teach courses in the program.

Finally, because the program relies heavily on other existing programs, DIGI will need little additional support from the Library and the Office of Information Technology Services.

7. Degree Requirements

The curriculum for the proposed DIGI program will allow students to satisfy all requirements at Stockton, including both program and general studies, as well as other university-wide requirements (FRST, W, Q, and other required course attributes). The following table contains a summary of the proposed DIGI curriculum. Course descriptions for new, DIGI-acronym courses are provided in Appendix E.

Digital Media Design and Practice
Proposed Curriculum Sheet

Program/Cognate Courses	**64**
One Art Design Course	**4**
ARTV 1164-2D Digital Design	4
One Web Design Course	**4**
ARTV 3621-Web Design (Pre-req.;ARTV 1164, ARTV2270 or 2265, POI)	**4**
Two Computer Information Systems Courses	**8**
CSIS[1] 2110 - Programming in Python	4
CSIS 2210-System Analysis and Design (Pre-req: CSIS 2110)	4
One Business Course	**4**
MKTG-2110-Marketing Principles	4
One Audio Course	4
COMM 3401-Audio II (POI)	**4**
One Video Course	**4**
COMM 2402-Video Production	4
One Writing (W1) course	**4**
For example: GAH 1280-Introduction to Digital Writing; GAH 4303-Multimedia Writing COMM 2210-Digital Storytelling GIS 4662-Digital Storytelling Theory and Practice	4
One Statistics (Q1) course	**4**
For example: CSIS 1206-Statistics; GNM 1110-Against All Odds	4

[1] As of Fall 2019, the CSIS acronym will be retired, and replaced by two new acronyms, CSCI and CIST. Course acronyms will be updated accordingly.

Four DIGI Courses	**16**
DIGI XXXX-Intro to Digital Media Design & Practice	4
DIGI XXXX-Digital Design Theory and Principles	4
DIGI XXXX-Issues in Digital Media	4
DIGI XXXX-Capstone	4
Three Program/Cognate Electives	**12**
DIGI XXXX-Game Design (prereq: CSIS 2110, 2210 & art design courses) DIGI XXXX-Advanced Web Development (prereq: ARTV 3621) DIGI XXXX-Internship ARTV studio courses COMM media studies courses CSIS courses Other courses, in consultation with preceptor	
General Studies	**32**
At-Some-Distance	**32**

Appendix A: Market Analysis: BA in Digital Literacy

Prepared for Stockton University

July 2018

In the following report, Hanover Research assesses demand for bachelor's degree programs in digital literacy, specifically highlighting demand trends within New Jersey and the Mid East. This report includes an examination of student and labor market demand, and an analysis of employment outcomes.

HANOVER RESEARCH

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Recommendations

Based on an analysis of degree completions, labor market demand, and market competitors, Hanover recommends that Stockton University:

1. **Move forward with the proposed BA in Digital Literacy.**

   Stockton should consider offering concentrations in Digital Arts and Digital Communication & Media specifically, as these both represent high growth fields in terms of student conferrals.

2. **Form partnerships with media and communication agencies in the New Jersey/NYC/Philadelphia area.**

   Several competitor programs help place their students in digital literacy-related internships at established partnership sites, which helps prepare graduates for future employment.

Key Findings and Program Demand Forecast

For digital literacy programs in New Jersey:

The proposed Digital Literacy bachelor's program represents a viable opportunity for new program development.

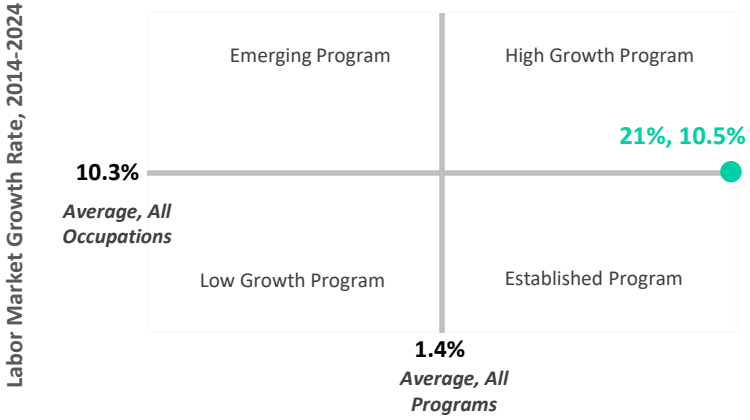
Data suggest strong student and labor market interest in the proposed program at the national, regional, and state levels. Additionally, Stockton would compete with only four similar programs in New Jersey, none of which are located in Atlantic County.

Regional competitors have working relationships with several media and communication organizations and other major corporations.

Stockton is located in a media rich area, giving students many internship opportunities. Conde Nast Publishing, NY Giants, Philadelphia Flyers, Comcast Sportsnet, and Creative Marketing Alliance are among the internship sites listed by competitor programs in the area. Outside of employment/recruiting agencies, which are responsible for most job postings in the digital literacy sector, top employers in New Jersey include: Accenture, JP Morgan Chase, International Beauty Movement, and Accion Labs.

Mid East Benchmark Analysis

Comparison of digital literacy completions and relevant labor market to all completions and all occupations in the Mid East



An analysis of local job postings suggests Stockton's program should provide students with skills in web development and graphic design.

Through a scan of digital literacy-related job postings in New Jersey and Southern New Jersey, the majority of openings are for web developers and graphic designers, most of which require a bachelor's degree. Among relevant job postings, the most commonly requested skills include: graphic design, computer programming, Adobe Software (Photoshop, Illustrator, AfterEffects, Final Cut Pro), and JavaScript.

Most jobs in digital media and design require a bachelor's degree, as opposed to an associate's or master's degree.

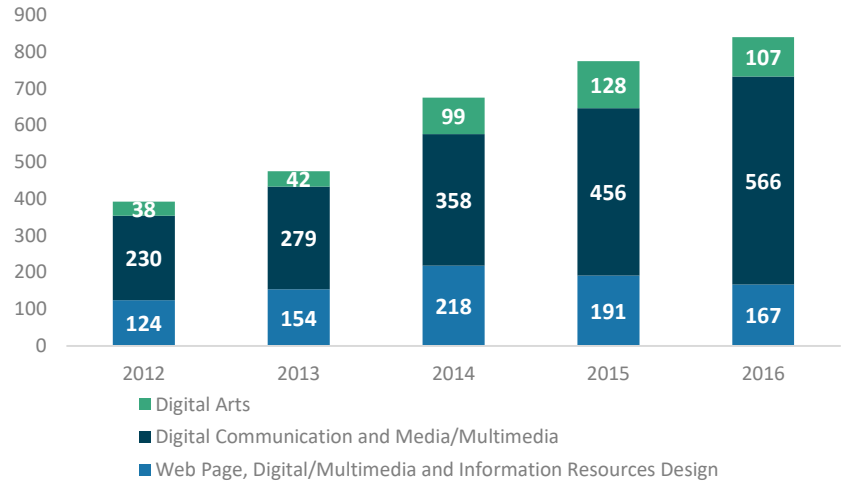
According to the Bureau of Labor Statistics, the plurality of workers in digital-literacy related professions across the United States report holding bachelor's degrees. Likewise, 1,577 of relevant job postings in New Jersey specify a bachelor's degree as a qualification, compared to only 42 postings that require a master's degree.

Degree Completions Analysis

BA in Digital Literacy

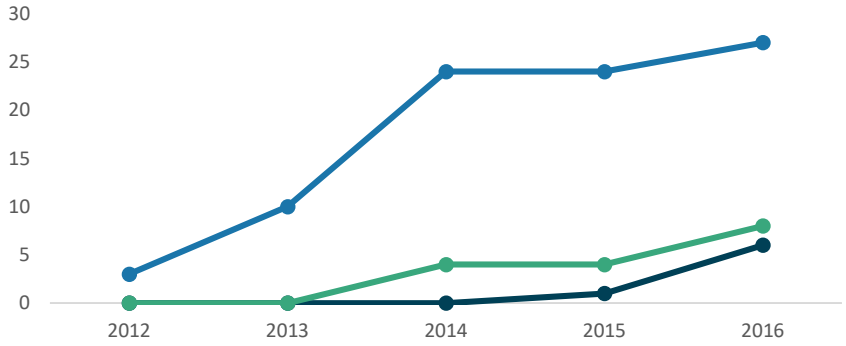
Mid East Degree Completions Volume

Mid East distribution of degree completions from 2012 to 2016



New Jersey Degree Completions Volume

New Jersey distribution of degree completions from 2012 to 2016



Source: IPEDS

Note: No Atlantic County institutions reported completions in Digital Literacy related fields.

Analysis of Findings

Digital literacy-related bachelor's completions show strong student conferral growth at every geographic level.

Nationally, fields relevant to digital literacy illustrate strong growth (12.9 percent) and volume (6,013 conferrals as of 2016). Individually, trends across the identified fields suggest the greatest student demand for Digital Communication and Media/Multimedia programs, which reported high volumes of student conferrals and faster than average growth (19.2 percent). However, conferrals from the smaller field of Digital Arts have grown by an even faster 25.1 percent, suggesting this is an emerging field of study.

In the Mid East region, digital literacy-related programs also report above average conferral volume from 2013 to 2016 as well as faster than average annualized growth (21.0 percent). Again, programs in Digital Communication and Media/Multimedia consistently reported the greatest completion volumes over the five-year period, but again, growth was fastest across Digital Arts programs at 29.5 percent per year.

Similarly, New Jersey programs exhibited faster than average growth across the combined fields (92.3 percent). Nearly all of this growth was driven by Web Page, Digital/Multimedia and Information Resources Design conferrals, which rose from 3 to 27 completions resulting in a growth rate of 73.2 percent. Very few completions were reported in either Digital Communication or Digital Arts, though both fields did report year on year growth.

Notably, nearly 22 percent of student completions were from programs with distance options as of 2016.

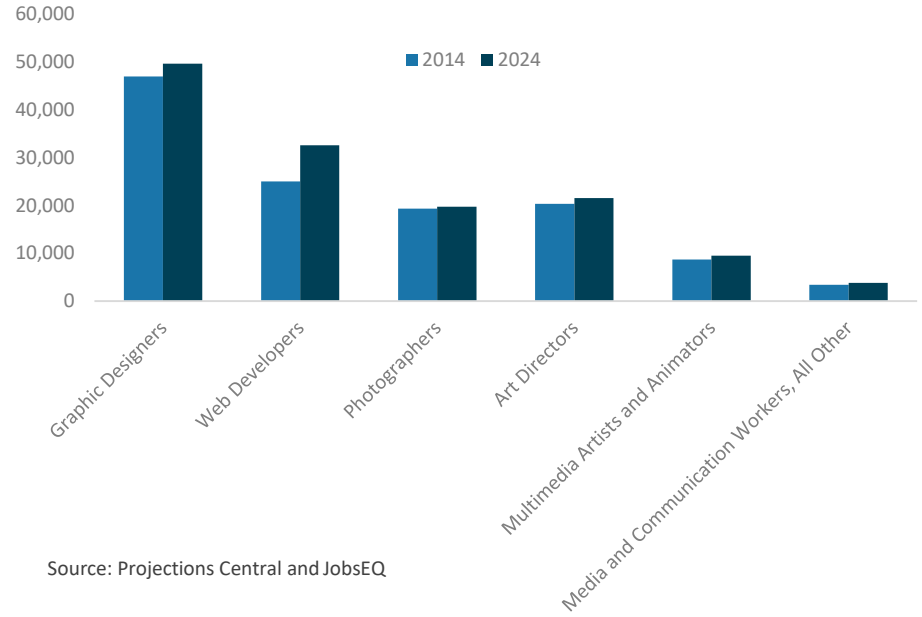
At the national level, digital literacy-related programs with online or hybrid options conferred 1,067 bachelor's degrees in 2016, compared to 4,946 degrees from programs without distance options. Five-year patterns suggest comparable growth rates across on-campus and distance option programs. Should Stockton develop programs in Digital Literacy, it might consider offering an online or hybrid option in addition to its on-campus offering.

Labor Market Analysis

BA in Digital Literacy

Mid East Current/Projected Job Availability

Mid East digital literacy-related positions as of 2014 and 2024 (projected)



Source: Projections Central and JobsEQ

Total Labor Market

Aggregate digital literacy-related job availability by geographic level

	New Jersey	Mid East	National
Baseline Year Employment	15,770	123,910	773,400
10-Year Projected Employment	16,220	136,940	814,900
Growth Rate	**2.9%**	**10.5%**	**5.4%**
Total Annual Openings	**400**	**3,860**	**68,600**

Methodology Note

State and region occupational employment projections correspond to 2014 to 2024 projections. National projections correspond to 2016 to 2026.

Analysis of Findings

At the national, regional, and state levels, occupational projections demonstrate positive labor market demand from graduates of the proposed digital literacy program.

Indeed, 10-year trends across relevant occupations at the regional level show above average projected volumes of job openings and about average growth (10.5 percent), compared to the 10.3 percent average growth rate across all occupations in the region. State and national occupational projections also point to a large number of job openings for digital literacy professionals with 400 annual openings anticipated for New Jersey and 3,860 openings across the Mid East Region.

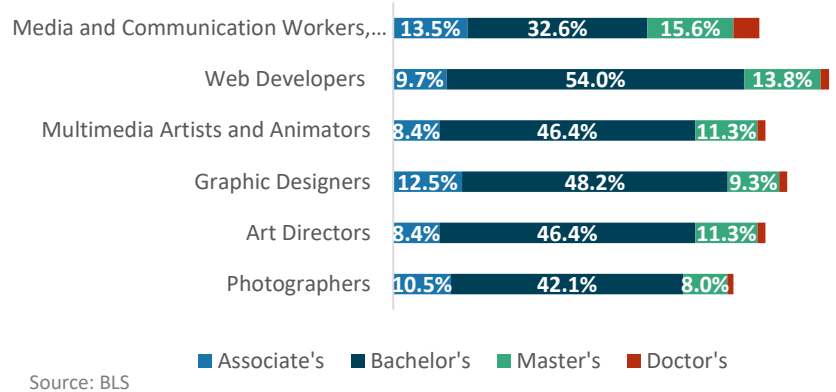
Demand is particularly strong for Web Developers in the Mid East and New Jersey, while Graphic Designers can expect the largest number of job openings.

Across the state, job openings for web developers are expected to grow by over 20 percent, compared to the 6.6 percent growth projected across all occupations in New Jersey. Meanwhile, Graphic Designers are expected to add the largest number of jobs in the region and currently have a large number of job postings available in New Jersey. However, future jobs growth for graphic designers is below average at both levels.

Educational Attainment

Bachelor's degrees are often required for careers in digital literacy.

The plurality of workers aged 25 and older in digital-literacy related professions across the United States report holding bachelor's degrees.



Source: BLS

Competitor Analysis

Based on an analysis of regional competitors, Hanover concludes the following:

The proposed digital literacy program would face a limited competitive landscape in New Jersey.

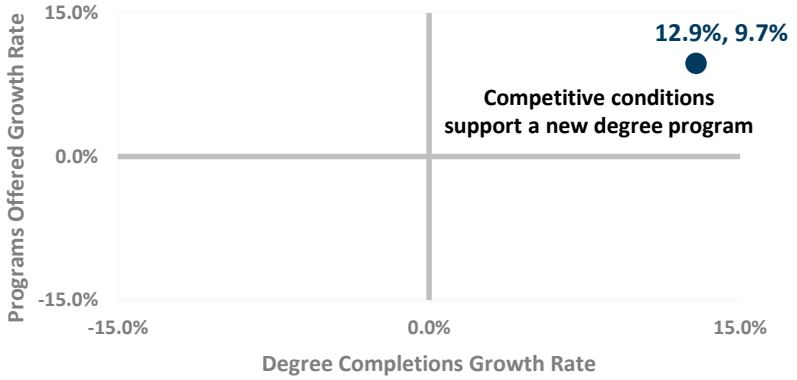
Stockton would compete with 425 similar programs at the national level and 75 in the Mid East, but only four in New Jersey. Furthermore, no Atlantic County institutions currently report bachelor's degree completions in Digital Literacy fields.

As of 2016, no New Jersey institution reported a program with a distance option, but Stockton may compete with 75 similar programs nationally.

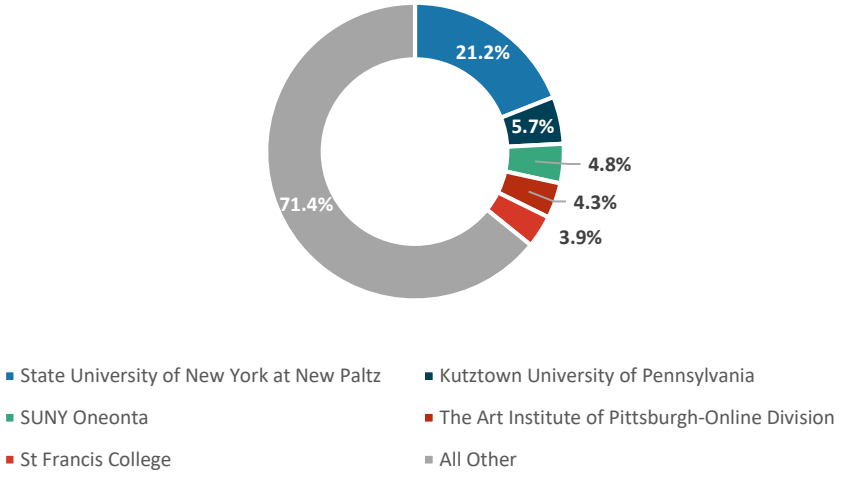
At the national level, programs with distance options rose from 41 to 75 total programs from 2012 to 2016, resulting in a strong growth rate of 16.3 percent. These distance option programs represented nearly 18 percent of all digital literacy programs in 2016, the latter which grew by only 9.7 percent over the five-year range.

National Market Saturation (2012-2016)

Nationally, do competitive conditions support an additional digital literacy program?

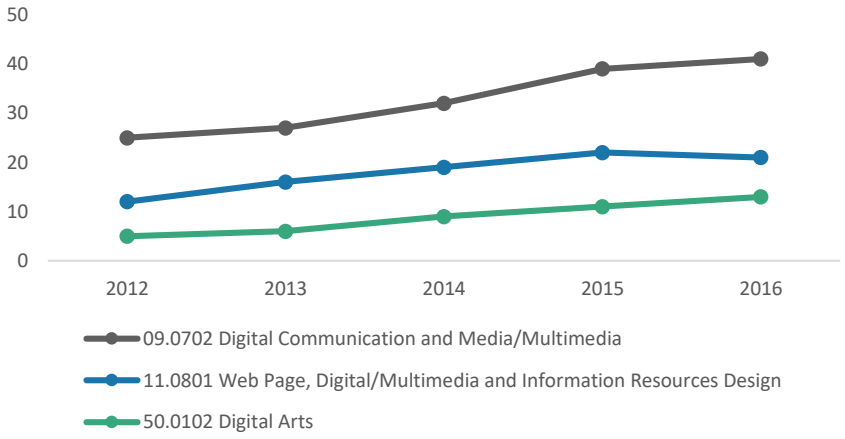


Top 5 Largest Competitors in the Mid East



Source: IPEDS
Note: No Atlantic County institutions reported completions under relevant fields.

Mid East Volume of Programs (2012-2016)



Employment Outcomes

BA in Digital Literacy

Common Career Pathways

Nationally, bachelor's programs in digital media and design note the following job titles as possible career pathways:

Source: Institutional Websites: (Penn State, Kentucky, National, Upenn)

Internships that prepare graduates for job placements are also common among competitors.

Kutztown University's Department of Cinema, Television, and Media Production readily prepares its students for post-graduate careers through their Senior Internship program. With over 100 internship locations, students gain full-time, full-semester training in digital literacy-related professions. Past internship sites included Intrinsic Value Films in New York City, ASR Media in Bethlehem, PA, Blue Ridge Communications, Comedy Central, Klip Collective, among many others.

SUNY Oneonta's BA in Digital Art program also requires similar practical experience. Along with many on-campus internships sites, students have opportunities to work in the New York City metropolitan area at the following venues: MTV, Scholastic Magazine, Mixer Magazine, Crush Music Management, Free Arts NYC, Smart Source Group, Bertelsmann Inc, and Seamen Society for Children & Families (SUNY Oneonta). Likewise, Rider University in New Jersey has internship agreements at the following organizations: Sovereign Bank, Conde Nast Publishing, New York Giants, Philadelphia Flyers, Comcast Sportsnet, Mid Jersey Chamber of Commerce, and Creative Marketing Alliance (Rider University). Stockton might consider partnering with these companies or similar organizations in its region.

Salary Projections

New Jersey mean salaries for digital literacy-related occupations are outlined below (as of May 2017).

The mean annual salary for all occupations in New Jersey is $56,970, which places Art Directors, Web Developers, and Multimedia Artists and Animators well above average.

Occupation	Average Salary	
	New Jersey	*U.S.*
Media and Communication Workers, All Other	$60,120	$53,160
Web Developers	$77,160	$74,110
Multimedia Artists and Animators	$70,230	$76,560
Graphic Designers	$56,460	$53,280
Art Directors	$101,510	$103,510
Photographers	$33,010	$41,940

Source: BLS

Real-Time Job Postings – New Jersey

BA in Digital Literacy

Employment in New Jersey

A real-time analysis of job postings in New Jersey revealed that there are 6,457 total jobs related to digital literacy for the 180 day period ending July 11, 2018.*

Out of the 6,457 digital literacy-related jobs available, 1,577 postings specify a bachelor's degree as a qualification (24.4 percent). By comparison, only 42 postings required a master's degree, suggesting a bachelor's level degree is appropriate. However, just because educational attainment is not specified in the majority of postings does not mean that a bachelor's degree is not required. In the postings that do require a bachelor's degree, a BA in Graphic Arts or a BA in Design is the most common degree listed. In-demand skills include computer programming languages (such as Javascript and SQL) as well as knowledge of Adobe software (Photoshop and Illustrator).

Sample Job Postings

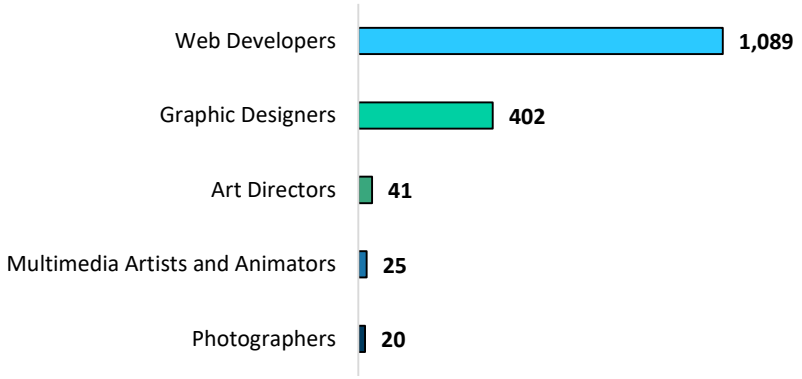
The following job postings are examples from top employers in New Jersey with recent listings:

Employer	Position	Desired Education
Robert Half – Edison, NJ	Production Artist	Bachelor's
Robert Half – Jersey City, NJ	Art Director	BA Graphic Arts
CSI Sports – Jersey City, NJ	Digital Media Manager	Not Specified
The Creative Group – Freehold, NJ	Graphic Designer	BA Graphic Design
Randstad – Princeton, NJ	Web Application Developer	Bachelor's
Randstad – Baskin Ridge, NJ	Visual Designer	BA/BS in Design

***Methodology Note**: Hanover used the previously identified occupational codes in this analysis – Photographers, Art Directors, Graphic Designers, Multimedia Artists and Animators, Web Developers, and Media and Communication Workers – All Other. In addition, Hanover incorporated key word search terms for occupations marketed by competitor programs. These terms included – Media Manager, Brand Designer, and Video Editor.

Recent Job Openings

Number of New Jersey Job Openings that Require a Bachelor's Degree



Top Skills Listed in Recent Job Openings

1. Javascript
2. Computer Programming
3. Adobe Photoshop
4. Structured Query Language (SQL)
5. Graphic Design
6. Adobe Illustrator
7. Adobe Creative Cloud

Certifications Listed in Recent Job Openings

1. Secret Clearance
2. Computer Service Technician
3. Informational Technology Infrastructure Library Certification
4. Microsoft Certified Professional
5. Microsoft Certified Solution Developer

Source: JobsEQ

Real-Time Job Postings – Southern New Jersey

BA in Digital Literacy

Employment in Southern New Jersey

All local data is reported for Atlantic, Ocean, Cape May, Camden, Burlington, Gloucester, Salem, and Cumberland Counties, New Jersey.

A real-time analysis of job postings in Southern New Jersey revealed that there are 679 total jobs related to digital literacy for the 180 day period ending July 11, 2018.

Across Southern New Jersey, job opportunities for digital literacy-related occupations are plentiful. The majority of postings are for *Web Developers* and *Graphic Designers.* However, it is important to note that some of the *Web Developer* postings require a bachelor's degree in computer science or engineering, rather than a digital literacy-related degree. However, bachelor's degrees in graphic or digital design are almost always required in job postings for digital, graphic, web, and other designers when employers specify educational attainment. The majority of digital literacy-related postings are centered around the Philadelphia suburbs of Cherry Hill (91 postings) and Mount Laurel (50 postings).

Top Employers in Southern New Jersey

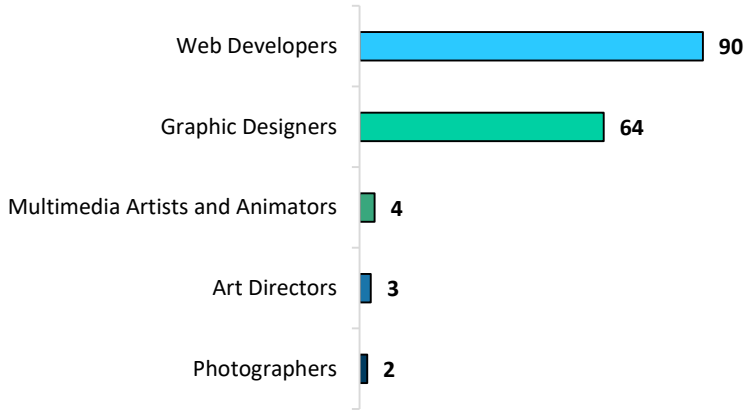
The following job postings are examples from top employers in New Jersey with recent listings:

Employer	Position	Desired Education
Robert Half – Moorestown, NJ	Digital Designer	Bachelor's
JobSpring Partners – Northfield, NJ	Web Developer	BS Computer Science
The Creative Group – Mount Laurel, NJ	Graphic Designer	BA Graphic Design
American Water Company – Voorhees, NJ	Digital Visual Designer	BA in Design fields
Visionary Brands, Inc.	eCommerce Graphic and Web Designer	BA in Graphic Design

Source: JobsEQ

Recent Job Openings

Number of Local Job Openings Requiring Bachelor's Degree



Top Skills Listed in Recent Local Job Openings

1. Javascript
2. Structured Query Language (SQL)
3. Graphic Design
4. Adobe Photoshop
5. Adobe Illustration
6. Adobe AfterEffects

Top Cities in Recent Local Job Openings

1. Cherry Hill, NJ (91)
2. Mount Laurel, NJ (50)
3. Lakewood, NJ (30)
4. Camden, NJ (19)
5. Moorestown, NJ (16)

Source: JobsEQ

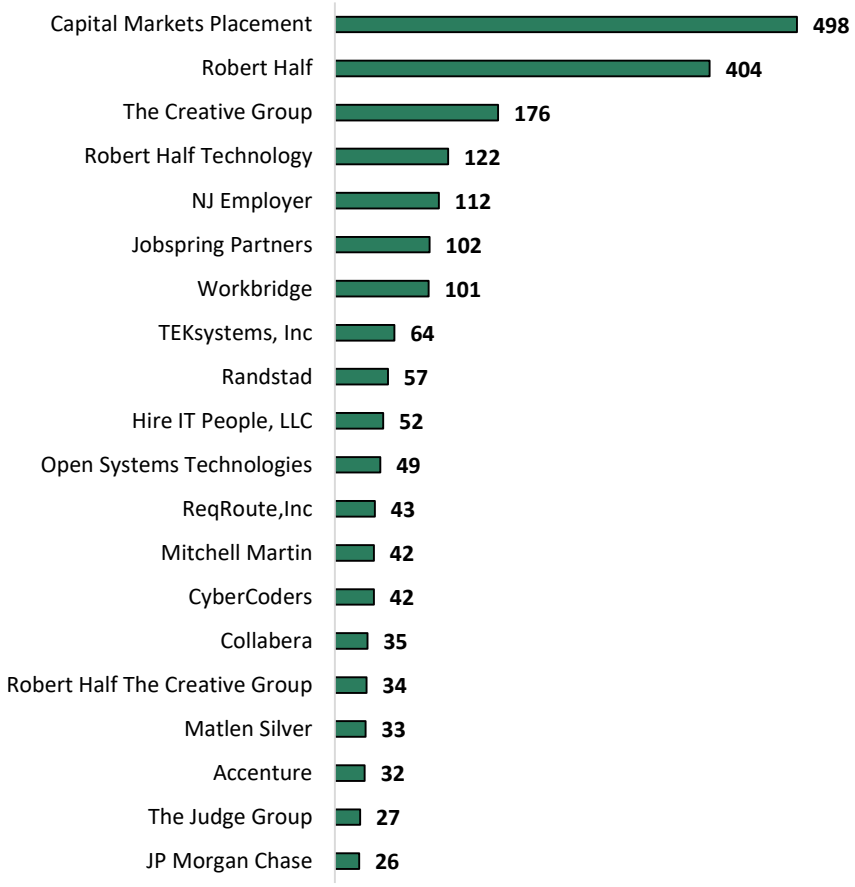
Real-Time Job Postings – Top Employers

BA In Digital Literacy

New Jersey Employers

Hanover identified the following as top employers in New Jersey, by number of job openings related to digital literacy.

Outside of employment/recruiting agencies, which are responsible for most job postings in the digital literacy sector, top employers in New Jersey include: Accenture, JP Morgan Chase, International Beauty Movement, and Accion Labs.

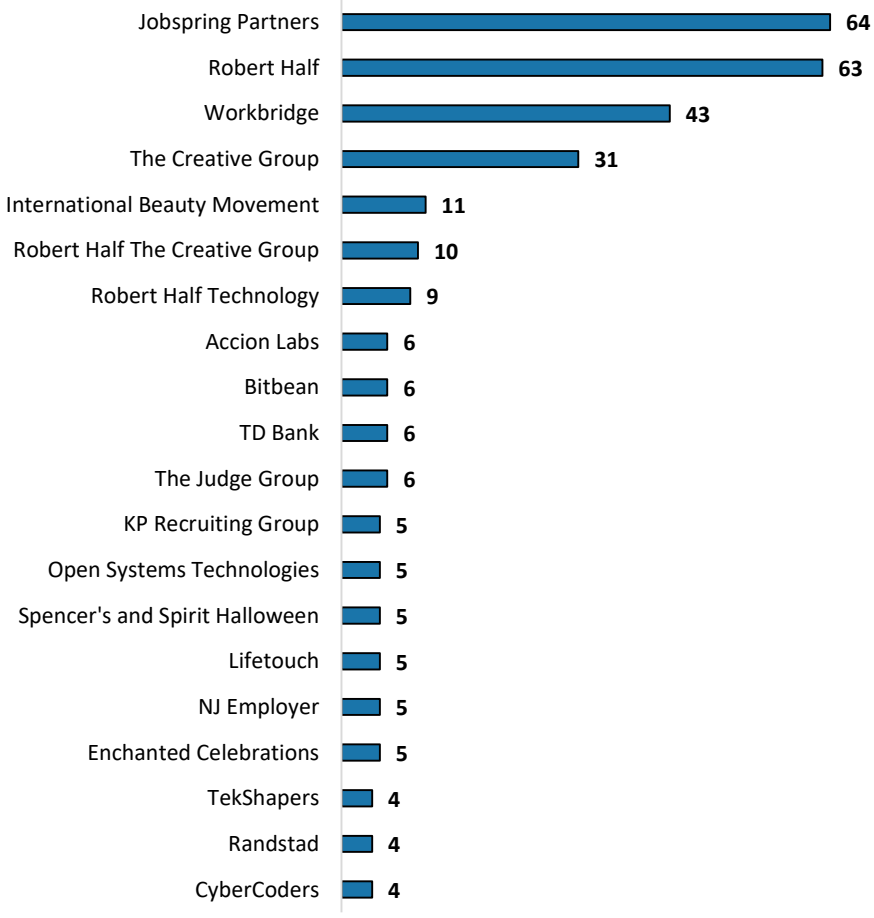


Source: JobsEQ

Southern New Jersey Employers

Hanover identified the following as top employers in Southern New Jersey, by number of job openings related to digital literacy.

Local data is reported for Atlantic, Ocean, Cape May, Camden, Burlington, Gloucester, Salem, and Cumberland Counties, New Jersey.



Student Demand Methodology

Hanover uses the most recent five years of completions data (2012-2016) from the National Center for Education Statistics (NCES) to estimate student demand for specific degree programs. The NCES uses a taxonomic system of numeric codes to classify postsecondary academic programs, known as the Classification of Instructional Programs (CIP) system. Definitions for each CIP code can be found in the table below. All award conferral data presented in this report were drawn from the NCES's **Integrated Postsecondary Education Data Center** (IPEDS). **Note:** When interpreting completions data, some considerations should be taken into account:

- Institutions classify their programs independently, meaning that two programs that share identical content could hypothetically be classified under different CIP codes. In addition, it cannot be assumed that IPEDS completions reported under an individual CIP code always correspond directly to an individual program at an institution.
- Newer programs may be excluded from completions data, as these programs have yet to graduate students.

CIP Code	Definition
50.0102 Digital Arts	A general, undifferentiated program that focuses on the use of computerized digital images as the primary medium of expression in the visual and performing arts, and that may prepare individuals for a wide variety of careers using new media, including graphic design, digital animation, motion graphics, 3D visualization, game and interactive media design, music and sound design, video production, web design, photography, and other fields.
09.0702 Digital Communication and Media/Multimedia	A program that focuses on the development, use, critical evaluation, and regulation of new electronic communication technologies using computer applications; and that prepares individuals to function as developers and managers of digital communications media. Includes instruction in computer and telecommunications technologies and processes; design and development of digital communications; marketing and distribution; digital communications regulation, law, and policy; the study of human interaction with, and use of, digital media; and emerging trends and issues.
11.0801 Web Page, Digital/Multimedia and Information Resources Design	A program that prepares individuals to apply HTML, XML, Javascript, graphics applications, and other authoring tools to the design, editing, and publishing (launching) of documents, images, graphics, sound, and multimedia products on the World Wide Web. Includes instruction in Internet theory, web page standards and policies, elements of web page design, user interfaces, vector tools, special effects, interactive and multimedia components, search engines, navigation, morphing, e-commerce tools, and emerging web technologies.

Source: IPEDS

Labor Demand Methodology

To analyze the employment outlook for graduates with education in digital literacy, Hanover examines labor projections, which align with six-digit occupations as defined by the Bureau of Labor Statistics (BLS) Standard Occupational Code (SOC) system. The SOC system is analogous to the CIP system, and the two are connected by the CIP-SOC crosswalk. The CIP-SOC crosswalk maps individual six-digit CIP codes to six-digit SOC codes. Hanover uses the CIP-SOC crosswalk to select occupations related to relevant CIP codes. Cross-walked codes are supplemented by occupations selected by Hanover as potentially relevant. Hanover selected occupations typically requiring at least a bachelor's degree unless otherwise indicated. These occupations are defined below.

SOC Code	Definition
15-1134 Web Developers	Design, create, and modify Web sites. Analyze user needs to implement Web site content, graphics, performance, and capacity. May integrate Web sites with other computer applications. May convert written, graphic, audio, and video components to compatible Web formats by using software designed to facilitate the creation of Web and multimedia content.
27-1011 Art Directors	Formulate design concepts and presentation approaches for visual communications media, such as print, broadcasting, and advertising. Direct workers engaged in art work or layout design.
27-1014 Multimedia Artists and Animators	Create special effects, animation, or other visual images using film, video, computers, or other electronic tools and media for use in products or creations, such as computer games, movies, music videos, and commercials.
27-1024 Graphic Designers	Design or create graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. May use a variety of mediums to achieve artistic or decorative effects.
27-3099 Media and Communication Workers, All Other	All media and communication workers not listed separately.
27-4021 Photographers	Photograph people, landscapes, merchandise, or other subjects, using digital or film cameras and equipment. May develop negatives or use computer software to produce finished images and prints. Includes scientific photographers, aerial photographers, and photojournalists.

Source: BLS

HANOVER RESEARCH

Appendix B New Major - B.A. in Digital Media Design and Practice

Stockton is considering offering a B.A. in Digital Media Design and Practice to undergraduate students. This major will offer courses in which students design, develop and implement digital media using multimedia technology and related theories. The program will be designed for students who have an interest in computer programming, computer graphics, animation, games, virtual reality environments, media design, and interactive technologies.

We would like to know your interest level if this program were available at Stockton. Please share your opinion by answering these questions.

1. Which areas of Digital Media are you interested in? *(Check all that apply)*
   - ☐ Application (app) development
   - ☐ Game design
   - ☐ Graphic design
   - ☐ Sound design
   - ☐ Virtual / augmented reality
   - ☐ Web development
   - ☐ None of the above

2. If it were offered today and you were declaring your major, how interested would you be in pursuing a B.A. in Digital Media Design and Practice? *(Check only one)*
   - ○ Very interested
   - ○ Interested
   - ○ Slightly interested
   - ○ Not interested
   - ○ Undecided

3. Why are you interested in this major? *(Check all that apply)* Leave blank, if you are not interested
   - ☐ This major would expose me to new technologies of interest
   - ☐ This major would help me find a job.
   - ☐ I would enjoy working in this field.

4. Demographics:

Status	**Major**	**Age**	**Gender**
○ Freshman	_____	○ 18-20	○ Male
○ Sophomore	**Concentration**	○ 21-23	○ Female
○ Junior		○ 24-26	○ Other
○ Senior	_____	○ Over 26	

5. Please use the space below for any comments or suggestions.

Thank you very much for completing this survey. If you would like more information regarding this major, email **leej@stockton.edu.**

Appendix C Stockton Student Survey Results

If it were offered today and you were declaring your major, how interested would you be in pursuing a B.A. in Digital Media Design and Practice? (Check only one)

	Very Interested	Interested	Slightly Interested	Not Interested	Undecided	Total
Number	8	27	52	34	8	129
%	6%	21%	40%	26%	6%	100%

Which areas of Digital Media are you interested in? (Check all that apply)

	App Development	Game Design	Graphic Design	Sound Design	Virtual/Augmented Reality	Web Development	None
Number	25	24	39	19	17	18	10
%	19%	19%	30%	15%	13%	14%	8%

Why are you interested in this major? (Check all that apply) Leave blank, if you are not interested.

	Exposure to new technologies	Help finding a job	Enjoyable field
Number	61	39	53
%	47%	30%	41%

Student demographics

Status	Number	%
Freshman	60	47%
Sophomore	15	12%
Junior	28	22%
Senior	26	20%
Total	129	100%

Gender	Number	%
Male	64	50%
Female	63	49%
Blank	2	2%
	129	100%

Age	Number	%
18-20	80	62%
21-23	42	33%
24-26	4	3%
over 26	3	2%
Total	129	100%

Appendix D: Creativity Lab

”Creativity Lab” needs:
(25) student workstations and (1) one faculty station.
All the stations have Wacom drawing tablets.

The faculty station is connected to a ceiling mounted Epson projector with speakers in the ceiling. The faculty station also has a Wolfvision document camera and connections for using a laptop.

Key Software: Adobe CC, Adobe Acrobat Reader, Autodesk Maya, Audacity, Unity* (*Unity is a freeware)
Utility Shockwave Player, Flash Player, Quicktime, Realplayer, ProTools.

(26) — Apple 27” 18-core iMacs Pro with 4.5 GHz Intel processor, 128GB memory
Radeon Pro Vega 56 with 8GB of HBM2 memory or Radeon Pro Vega 64 with 16GB of HBM2 memory

1----Professional staff-Lab manager
1 — Faculty podium

1 — Color laser printer

1 — black and white printer
2 — Epson Professional flatbed scanners

2 — Projection screens (one in the front and the second one in the back of the lab)

1 — White board

1 — Critique Board
1 — Elmo projector
1----Sound proof booth-professionally sound-proofed
1----Professional voice microphone
1----Gooseneck pop filter

1----Zoom LiveTrak L-12 mixer
5---XLR cables
5---Zoom H-6 Six Track Portable Handy Recorder Bundle

Appendix E: DIGI Course Descriptions

DIGI XXXX INTRODUCTION TO DIGITAL MEDIA DESIGN AND PRACTICE.

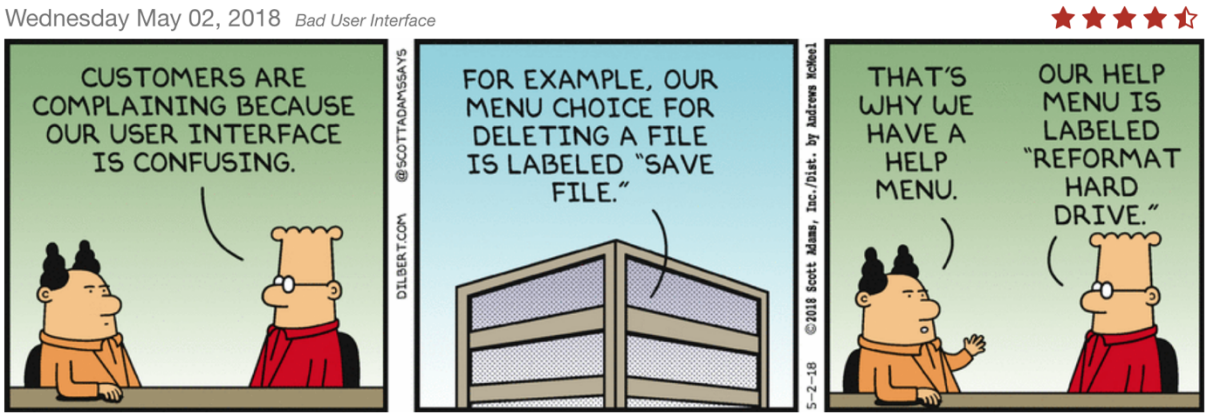
This course will introduce fundamental principles and practice involved in digital media design and practice. Students will explore different digital media and discuss these artifacts from a variety of perspectives including social, cultural, economic, and artistic. Topics include the impact of digital technologies on culture and communication, sociological effects of technology on the individual and community, and emerging philosophies of technology. In addition, principles of media theory, human factors, and usability will be introduced.

Course objectives

Students will be able to:

1. Define the key terms, theories and concepts related to digital media design and practice,
2. Explain the economic, social, and political forces that shape digital media industries,
3. Describe the various ways that audiences use media in their lives,
4. Describe the role of digital media creators
5. Explain contemporary issues that will affect the future of major forms of media,
6. Develop digital products by applying key theoretical approaches
7. Utilize digital technology tools as communication forms
8. Re-create text-based content into a multimedia digital format
9. Demonstrate online collaboration and participation skills
10. Develop creative, critical and problem-solving skills
11. Improve collaborative problem solving skills in inter/multidisciplinary field

DIGI XXXX DIGI DESIGN THEORY AND PRINCIPLES



This course will provide a comprehensive overview of the User Interface (UI) and User Experience (UX) process. When creating any digital product or service, such as an app, interactive game, or website, understanding the end users and their behaviors will play a critical role in the effectiveness and success of the product. This course will introduce a systematic design process based on a set of techniques and also on a cycle of discovery, including an assessment of what the user needs, the design of interfaces based on the needs, and an evaluation of the design in order to determine the extent to which the user's goals are met.

Objectives (Adopted from UW, https://canvas.uw.edu/courses/882160/assignments/syllabus)

On the successful completion of this course, students should be able to:

1. Gather useful information about users and their behaviors through asking, looking, learning, and trying
2. Analyze information about users and organize it into useful summaries
3. Convey findings of users' needs by sketching
4. Create a low-fidelity prototype of a product
5. Evaluate and describe the strengths and weaknesses of a variety of prototyping methods
6. Describe the process of UX design as a cyclical, iterative process
7. Describe the differences between UI and UX
8. Analyze an interaction design problem and propose a user-centered process, justifying the process and identifying the trade-offs
9. Use appropriate terminology to participate in critiques of design ideas in a constructive manner
10. Prepare high quality, professional documentation and artifacts relating to the design process for inclusion in a professional portfolio

DIGI XXXX ISSUES IN DIGITAL MEDIA DESIGN & PRACTICE

This course will explore issues in digital media including but not limited to journalistic integrity, ethics, copyright issues, e-communication, e-communication, and project management. It will provide an understanding of core cultural themes related to contemporary digital media, including access, surveillance and privacy, participation, and global citizenship. With the prevalence and immediacy of digital media, students will learn to examine digital products in diverse contexts, such as business, politics, and education.

Prerequisites: DIGI XXXX Introduction to Digital Media Design and Practice.

Course objectives

Students will be able to:

1. Describe contemporary frameworks of ethical standards and their purpose employing global perspectives,
2. Review and assess current debates concerning journalistic integrity,
3. Describe major issues of intellectual property as they pertain to digital media,
4. Explain issues that impact e-communication and project management,
5. Contextualize the creation of digital media within broader cultural concerns such as access, surveillance, privacy, participation,
6. Analyze and respond to global (international) issues of ethics in digital/social media,
7. Describe points of similarity and difference related to digital media created for diverse contexts, such as business, politics, and education.

DIGI XXXX DIGITAL MEDIA CAPSTONE

This culminating course will be an applied/practical course in which the student completes an internship or special project relating to the field of digital media design and practice. Internships may be taken at off-campus or on-campus sites (dependent upon availability) and will focus on the professional use of digital media skills. Students may pursue a special project over the course of one full semester based on student interest and supervised by one of the faculty.

Prerequisites: To be taken in one of the final two semesters of coursework.

Course objectives

Students will be able to:

1. Demonstrate and apply mastery of terminology, theories and concepts related to digital media design and practice,
2. Assess media project requirements as described by clients at the internship or project site,
3. Articulate proposed digital media project in response to client needs,
4. Collaborate with team and clients associated with projects,
5. Develop an effective digital media project that meets project needs.
6. Write reflectively about project experience

DIGI XXXX GAME DESIGN & DEVELOPMENT

This course focuses on aesthetic and technical aspects of design, development and implementation of games and virtual reality experiences, including game history and genres, game design, story development, content creation, interface design, 3D modeling & animation, and event-driven multimedia programming using game-design software. Students will work in groups to design and develop a game from start to finish.

Prerequisites

CSIS 2110: Programming in Python, CSIS 2210: System Analysis & Design, one graphic design course

Learning Objectives

Students will be able to:

1. Describe the history and evolution of digital games and game genres
2. Critique games from the viewpoint of engagement, value, usability, performance, and accessibility to diverse players
3. Analyze and interpret user requirements to design and develop appropriate solutions.
4. Conceptualize the structure of games (i.e. players, objectives, rules, procedures, conflict and possible outcomes) and the dramatic elements (story, challenge, sense of fun, etc.) that create memorable experiences for gamers
5. Explore the basic methodologies and conceptual skills of game design, such as systems thinking, iterative design process, creative collaboration, critical analysis, etc.
6. Conceptualize and develop a game with effective design elements and play strategy
7. Collaborate effectively with peer development team - Demonstrate appropriate project management skills for entry into the interactive game industry as a programmer.

DIGI XXXX ADVANCED WEB DEVELOPMENT

This course presents the process of designing and developing web sites from conception through publication, using web authoring software programming. Students will design techniques for mobile, tablet and desktop devices, integrating graphic design, audio/video, and social media interactivity. This course also covers the principles of search engine optimization and implementation of web analytics services.

Prerequisites:

DIGI XXXX Introduction to Digital Media Design and Practice, ARTV 3621 Web Design

Learning Objectives: Students will be able to:

1. Solve advanced web coding problem using web-authoring programs, centering on typography and page layout in multiple devices.

2. Execute harmonious web page design with type, imagery and other elements, such as animation and audio.

3. Demonstrate technical understanding and skills for various media and file conversion methods including use of image and sound editing software.

4. Craft and verbally present thumbnails, rough comprehensives and finished products.

5. Utilize color psychology in terms of symbolism and cultural influence.

6. Propose design changes that promote an understanding of form and function, including principles of visual organization and user interface.