ACCELERATED BS IN DATA SCIENCE/COMMUNICATIONS (3+1)

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The Accelerated Dual-Degree BS in Data Science/MS or MA in Communications (3+1) is offered to highly motivated students who have a passion for data science and ambitions for a career in global communications. The program begins with undergraduate data science and communications courses to set the foundation for your master's degree. You will enjoy considerable cost savings by earning both degrees in just four years and have the advantage of entering the workforce with the experience, skills and the advanced education needed to begin your career.

Data helps people make informed decisions, helps scientists find solutions to existing problems and brings the global community together to help improve people's lives. Paired with a degree in communications, the focus extends to a variety of industries.

Students in this program must complete the requirements (http://catalog.qu.edu/arts-sciences/mathematics/data-science-bs/#newitemtext) for the BS in Data Science during their first three years at Quinnipiac. Students must complete the requirements for one of the following graduate programs in Communications by the end of their fourth year:

- MA in Cinematic Production Management (http://catalog.qu.edu/graduate-studies/communications/cinematic-production-management-ms/#curriculumtext)
- MS in Interactive Media and Communications (http://catalog.qu.edu/graduate-studies/communications/interactive-media-ms/#curriculumtext)
- MS in Journalism (http://catalog.qu.edu/graduate-studies/communications/journalism-ms/#curriculumtext)
- MS in Public Relations (http://catalog.qu.edu/graduate-studies/communications/public-relations-ms/#curriculumtext)
- MS in Sports Journalism (http://catalog.qu.edu/graduate-studies/communications/sports-journalism-ms/#curriculumtext)

Upon completion of the BS in Data Science, students will:

1. **Have a deep understanding** of the mathematical, statistical and computer science concepts necessary for data science.
2. **Understand** the technology stack necessary to bring quantitative analysis to production in any industry or academic setting.
3. **Utilize** complicated data and advanced machine learning models to solve real-world problems—whether that is predicting customer retention or identifying the impact of rain on floodplain soil conditions.
4. **Leverage** these skills and expertise in a chosen domain (e.g., biology, business, economics, history, psychology).

Upon completion of the MA in Cinematic Production Management, students will develop the following competencies:

1. **Creative Thinking and Visual Literacy:** Develop the ability to conceptualize and produce visual stories demonstrating aesthetic competence, fluency with visual grammar, and an appreciation of the historical context from which new forms and stories are created.
2. **Written and Oral Communication:** Acquire the facility to create effective content for visual media, as well as an ability to demonstrate both written and oral proficiency within a variety of professional formats and delivery platforms.
3. **Critical Thinking and Reasoning:** Develop the skills needed to critically analyze the work of others as a means to problem-solve and better inform students’ own original creative output. Achieve a proficiency in creating professional quality work within the parameters and practical limitations of a broad spectrum of production environments. Recognize works of art as visual arguments, and be able to use analytical skills to assess their effectiveness.
4. **Information Fluency:** Learn to plan and produce effectively across a wide array of technical contexts, demonstrating facility and expertise with preproduction, production and postproduction phases of film, television and streaming media creation.
5. **Social Intelligence:** Demonstrate an ability to work effectively within groups and production teams, to understand and manage collaborations and to act ethically, constructively and responsibly in the process of achieving individual and common goals.
6. **Diversity Awareness and Sensitivity:** Acquire an understanding of and respect for the similarities and differences among human communities, including a recognition and appreciation for the unique talents and contributions of all individuals.
7. **Responsible Citizenship:** Learn to recognize and analyze media-related issues and influence decisions and actions at the local, national and global levels, and to become engaged as responsible citizens.

Upon completion of the MS in Interactive Media and Communications, students will develop the following competencies:

1. **Conduct In-Depth Research:** Conduct in-depth research using professional methods and terminology that demonstrates fluency in the use of the formal vocabulary and concepts. This includes recognizing the influence of major cultural, historical, technological and aesthetic trends on contemporary interactive products and services.
2. **Practice Creative and Critical Thinking:** Practice processes and methods that cover empathy, the psychology of the user, problem definition and ideation methods. They build a knowledge base and skillset required to practice across media and to conduct the “deep work” required of master’s level study.
3. **Solve Creative Problems:** Solve creative problems using the synthesis of technical, aesthetic and conceptual knowledge. This is demonstrated by the ability to create and develop visual and written responses to communication problems using research, preproduction, storyboarding and media production techniques.
4. **Implement Processes:** Use industry standard processes and methods to produce communications that incorporate a high level of strategy, planning, production and distribution. This is exhibited by the ability to solve communication challenges by using analysis, prototyping, user testing and outcome evaluation, among other methods.
5. **Develop Strategies:** Know how to use words, visuals, video, social media and mobile media to build an audience and deliver content. They create an effective media presence and apply their knowledge to strategic challenges within real-world situations.
6. **Actualize Concepts**: Actualize technical, aesthetic and conceptual decisions based on using appropriate tools and technology. This includes knowing how to learn techniques with the recognition that technological change is constant.

7. **Produce Professional Media**: Produce a body of media suitable for seeking professional opportunities in their chosen branch of communication. This is facilitated through the process of identifying and packaging works, creating a consistent message, and using the results of their research and practice. The focus is on a unique and persuasive body of work to be distributed across mediums.

Upon completion of the MS in Journalism, students will develop the following competencies:

1. **Understand** professional journalistic practices, ethical standards and technologies and be able to apply reason to develop ideas within these structures.
2. **Analyze** information based on journalistic practices of research, interviews and observation.
3. **Evaluate** information in determining the story’s narrative structure and reach via social media and other applications.
4. **Report and compose** a story, either visual, multimedia or text, that informs, enlightens, entertains and is useful to the reader or audience within professional journalistic reporting and writing practices and ethical standards.

Upon completion of the MS in Public Relations, students will develop the following competencies:

1. **Information Fluency and Analysis**: Plan, conduct, analyze and report primary research findings based on a survey, focus group or other appropriate research means, as well as interpret secondary industry research for a client.
2. **Critical and Creative Thinking**: Propose measurable, attainable objectives for a client based on primary and secondary research findings and produce campaign strategy and tactics designed to help the client achieve its goals.
3. **Effective Communication**: Demonstrate both written and oral proficiency within a variety of traditional and new industry communication vehicles and message delivery formats.
4. **Social Intelligence**: Demonstrate an ability to work effectively and responsibly within groups and manage relationships with clients, team members and publics to achieve individual and common goals.
5. **Quantitative and Qualitative Literacy**: Propose an evaluation of a campaign to measure the campaign’s effectiveness.

Upon completion of the MS in Sports Journalism, students will develop the following competencies:

1. **Understand** professional sports journalistic practices, ethical standards and technologies and be able to apply reason to develop ideas within these structures.
2. **Analyze** information based on sports journalistic practices of research, interviews and observation.
3. **Evaluate** information in determining the story’s narrative structure and reach via social media and other applications.
4. **Report and compose** a story, either visual, multimedia or text, that informs, enlightens, entertain and is useful to the reader or audience within professional sports journalistic reporting and writing practices and ethical standards.