[redacted]

New Jersey City University

REQUEST FOR ACADEMIC PROGRAM APPROVAL

OFFICE OF THE PROVOST
NEW JERSEY CITY UNIVERSITY

RECEIVED
MAR 03 2016

Program Title: Master of Science in Business Analytics and Data Science

Type of Program:
Graduate: x
Certificate:
Interdisciplinary:
Undergraduate major:
Undergraduate minor:

[redacted]

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I. PROGRAM OBJECTIVES

As the head of Gartner Research, Peter Sondergaard said, "Information is the oil of the 21st

II. EVALUATION AND LEARNING OUTCOMES ASSESSMENT PLAN

Overview

Program faculty and other stakeholders will assess the program on an on-going basis on the following components:

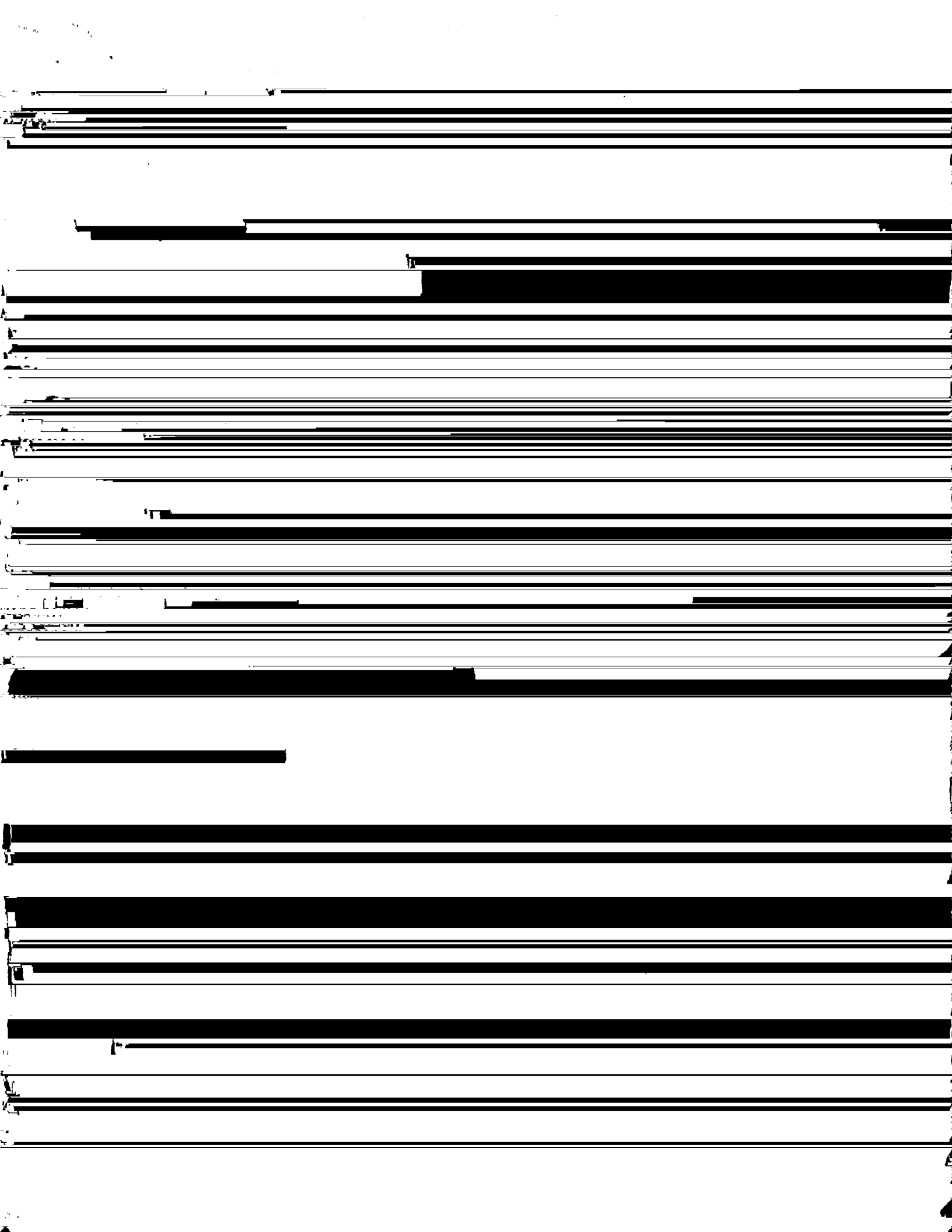
1. Definition of learning outcomes and alignment of the curriculum.
2. Design of assessment tools.
3. Collection and analysis of assessment data.
4. Dissemination of results.
5. Continuous improvement of the curricula, instruction and the assessment process.

All of the proposed coursework supports the seven university-wide learning goals (UWLG).

Learning Outcome	Measure

[redacted]

theoretical and research background, thus ensuring student success. The School of Business



with the external community. The program will be one of the most quantitative programs in

the university, producing quality graduates who will go on to make significant contributions to

the business community, adding to the academic reputation of the university.

Comparison to Other Masters Programs

The following universities in New Jersey offer graduate programs in data science

advantage of the rich pool of IT professionals working at the businesses in the area, who will be a good fit for this program.

A marketing plan for the program that involves online, print, and radio advertisements, open houses, and direct outreach to potential candidates will be put together to drive recruitment.

Estimated Student Enrollment

[redacted]

expected to reach over sixty students by year five.

Academic Year	New Students	Continuing Students*	TOTAL
Year 1	15	0	15
Year 2	20	14	34
Year 3	25	18	43
Year 4	30	23	53
Year 5	35	27	62

*Assuming approximately 10% attrition rate per year

Revenue: Tuition and Fees

The revenue from tuition and fees, based on projected student enrollment is detailed below:

Academic Year	No of Students enrolled	Tuition and Fees*

Summary

	Year 1	Year 2	Year 3	Year 4	Year 5
Revenue	$207,805	$443,318	$560,085	$688,727	$805,494

[redacted]

- Letters of recommendation

Three letters of recommendation should be submitted, based on academic or professional experience.

- Writing sample

A personal Statement of Purpose, of between 1000 and 2000 words, should describe the

and goals are aligned with the program.

- Resume Curriculum Vitae

A current resume / curriculum vitae that outlines the applicant's educational background, employment history, professional activities, and other activities that provide support for the

Year 2	Fall	BADS 615	Data Visualization and Communication	3
	Fall		Elective 1	3
	Fall		Elective 2	3
	Spring		Elective 3	3
	Spring		Elective 4	3

[redacted]

APPENDIX A. Course Descriptions

Core Courses

BADS 601 Introduction to Data Science

This course will introduce students to the fundamentals of data science. Students will learn to [redacted]

FINC 625 Financial Modeling

This course will cover standard financial models in the areas of corporate finance, portfolio management and valuation of options and other securities. Various techniques such as Monte Carlo simulation and optimization will be covered. Implementation of these models in Excel or R will be covered.

Management Electives

MGMT XXX Supply Chain Analytics

This course will provide students with a thorough understanding of supply chain analytics such as location decision, inventory control, quality assurance (QA), quality function deployment (QFD), supplier selection, and multi-criteria decision making. Supply Chain Analytics is one of

the crucial business areas using business intelligence applications and dealing with Big Data. Students will be exposed to aforementioned critical and effective techniques used in supply

chain management. Students will also be exposed to data-driven decision making process

topical ethical issues. Everyone will be engaged in researching, writing, and presenting one or more academic paper. There will be significant emphasis on the refinement of the broad skills necessary for successful management in a firm. To that end, we will focus on reading for

ACCT XXX Auditing and Data Analytics
This course will give students a good understanding of using data analysis in the field of public auditing and internal auditing.

ACCT XXX Big Data Ethics and Governance
This course will explore the ethics behind the use of Big Data. Issues around privacy and confidentiality of data and transparency of data will be discussed. Governance issues around big data will also be addressed.

ACCT XXX Forensic Accounting and Big Data Analytics

Students will learn about the use of Big Data techniques in the field of forensic accounting to

detect white collar crime and fraud.

APPENDIX B.

References

http://www.cio.com/article/3013566/analytics/lack-of-big-data-talent-hampers-corporate-analytics.html?token=%23tk.CIONLE_nlt_cio_insider_2015-12-11&idg_eid=40f368376f5ba6a57dc57f32f5ea2278&utm_source=Sailthru&utm_medium=email&utm_campaign=CIO%20Daily%202015-12-11&utm_term=cio_insider#tk.CIO_nlt_cio_insider_2015-12-11

Davenport, T., & Patil, D.J. (2012). *Data Scientist: The Sexiest Job of the 21st Century*. Retrieved from https://hbr.org/2012/10/data-scientist-the-sexiest-job-of-the-21st-century/ar/pr