NC State University
Certificate Proposal Form

Certificate Title: __Graduate Certificate in Operations and Supply Chain Management________
   New: ☐
   Revision: ☒
Classification of Instructional Programs (CIP) Discipline # (6 digits): __52.0203____
   *Please ensure that you select the appropriate CIP code for your certificate program. Please consult this website for more information about CIP codes: https://nces.ed.gov/ipeds/cipcode/default.aspx?y=55

Certificate Type:
   On-Campus: ☐
   Distance: ☐
   On-Campus & Distance: ☒

Proposed Effective Date: ___Fall 2019_______________________

Director of the Certificate Program: ___Don Warsing________________________
Program Coordinator (if different from Director): ______Jenny Champ___________
Graduate Services Coordinator: __Kiresten Branch_________________________-
College: ___Poole College of Management_______________________________
Department/Program: __Business Management_____________________________

Catalog Description:
The Graduate Certificate in Operations and Supply Chain Management is a one to two year program that is designed for working professionals in the Research Triangle community. They will obtain advanced skills in strategies, processes, planning and control, quality, scheduling, work design, and advanced operations techniques using a variety of managerial and quantitative models.

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<th>Enrollment</th>
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Attachments:
☒ Proposal Document
☐ Statement of other departments likely to be affected and summary of consultation with those departments
☒ Program-level assessment
☒ Campus Routing Form
☒ Signature Page
Program justification
The Poole College of Management proposes the addition of an online track to the Graduate Certificate in Operations and Supply Chain Management (GCOSCM). The certificate program is designed to provide access to graduate training in operations and supply chain management to working professionals in the community with baccalaureate degrees.

The program supports the goals of NC State’s strategic plan:

1. Enhance student success: Improved understanding of operations and supply chain concepts will prepare students to advocate innovation based on both scientific and budgetary arguments, training that will allow them to transfer success in the laboratory to success in the marketplace.
2. Invest in faculty: Expanded opportunities to engage with graduate students will allow us to attract and retain research-oriented faculty
3. Enhance interdisciplinary activities: The certificate program will encourage students from other colleges to take more courses in operations and supply chain management
4. Organizational excellence: The certificate will be provided by opening up seats in sections that are currently under capacity.
5. Enhance local engagement: Excellence in operations is a prerequisite for success in any organization; employees at companies such as Bayer Crop Science, IBM, and MetLife should find this program especially attractive.

Description
The Graduate Certificate in Operations and Supply Chain Management is a one to two year program that is designed for working professionals in the Research Triangle community. They will obtain advanced skills in strategies, processes, planning and control, quality, scheduling, work design, and advanced operations techniques using a variety of managerial and quantitative models.

Who should enroll
Enrollment is open to the following:

i) All full-time, part-time and on-line MBA students who wish to signal their operations and supply chain management expertise to the job marketplace

ii) Business executives and entrepreneurs who aspire to gain or improve their decision making skills in operations and supply chain management, and

iii) Lifelong education students who want to improve their ability to apply operations and supply chain management principles.

Benefits to enrolled students

i) Learn about the latest tools and techniques in operations and supply chain management

ii) Learn how to apply these tools and techniques to actual business situations, using real company data

iii) Learn from seasoned MBA faculty, many of whom have Ph.D.s from top business schools such as Arizona State, Georgia Tech and North Carolina and work experience with Fortune 500 companies

iv) Learn in small classes that foster an intellectually stimulating environment

v) Improve prospects for career advancement
vi) Benefit from networking opportunities with other business students/executives enrolled in the program

**Program Structure**

*Management* The program will be housed in the Poole College of Management for administrative purposes. The DGP will be Professor Donald Warsing.

*Curriculum* Students must complete twelve hours of courses with grades of B– or better in every course. MBA 540 is a prerequisite for all other courses.

Required course

MBA 540 Operations and Supply Chain Management (2 hours)

Ten hours of elective courses selected from the following list:

MBA 541 Supply Management (3 hours)

MBA 542 Supply Chain Logistics (3 hours)

MBA 543 Planning and Control Systems (3 hours)

MBA 545 Decision Making Under Uncertainty (3 hours)

MBA 549 Supply Chain Practicum (3 hours)

MBA 553 Business Process Design and Analysis (3 hours)

MBA 590 Analytical Supply Chain Management (3 hours)

MBA 590 Strategic Supply Chain Management (3 hours)

MBA 590 Contract Management (1 hour)

MBA 590 Monte Carlo Decision Analysis (1 hour)

**Admission requirements**

Graduate students at NC State must be in good standing and must submit an application to the certificate program that will be reviewed and approved by the coordinator. Students not attending NC State must have completed a baccalaureate degree. A minimum GPA of 3.0 in undergraduate and graduate work combined is required for admission to the program. Those with less than a 3.0 may be admitted provisionally. Provisionally admitted students must initially take MBA 540 and earn a grade of B (3.0) or better.

**Standards for the certificate**

Students must complete the required credit hours with an aggregate GPA of 3.0 or higher. Credit toward the certificate in a particular course will be given only if a grade of B- or better is given in the course. All courses in the program must be taken for a letter grade. No transfer credits will be accepted in the program and it must be completed within three years. A student may obtain more than one graduate certificate in a different field. Each certificate must have at least nine (9) credit hours which are unique to it. This particular certificate requires twelve (12) credit hours.

**Relationship to admission to other degree programs:**
Applicants will be notified in all applications and promotional materials that "Academic success might have a strong bearing on admission to a degree program BUT completion of a certificate program in no way guarantees entry into a graduate degree program, which is done through a separate application process."

**Graduate Faculty:**

Full professors: Sebastian Heese, Robert Handfield  
Associate professors: Eda Kemahlioglu-Ziya, Jeffrey Stonebraker, Donald Warsing  
Assistant professor: Tim Kraft

**Responsibility for Administration and Resources**

This certificate program will reside in the Department of Business Management in the Poole College of Management. The certificate coordinator will be a faculty member from that department. Existing resources will be used to support the administration of this program.

The certificate coordinator will

- Make all admission decisions to the certificate program
- Notify the Dean of the Graduate School of the student's completion of certificate requirements
- Function as liaison with academic departments and the Graduate School
- Convene faculty as needed to review the program and discuss possible changes in admission requirements and curriculum

**Program or Policy Changes for this Certificate**

Changes in the GCOSCM will be determined by the faculty and channeled through the appropriate departmental/college committees. Changes will be reported to the Graduate School.
LEARNING ASSESSMENT

At the time they complete this certificate program, graduates are expected to

- be satisfied with the usefulness of the certificate program in enabling them to achieve their professional goals
- be sufficiently satisfied with the certificate program to recommend it to others with the same professional goals
- be satisfied with the appropriateness of the courses in providing the knowledge or training they anticipate needing for their professional goals
- be satisfied with the frequency and timeliness of the courses offered for the certificate
- be satisfied with the quality of teaching in certificate courses
- be satisfied with the overall educational experience of the certificate program

Metrics: Exit Survey administered by Graduate School
Graduate Certificate in
Operations and Supply Chain Management
North Carolina State University

This request has been reviewed and approved by the appropriate campus committees and authorities.

Endorsed By:

Head, Department/Director of Graduate Program (Printed Name and Signature)  Date

Recommended By:

Chair, College Graduate Studies Committee (Printed Name and Signature)  Date

Endorsed By:

College Dean (Printed Name and Signature)  Date

Recommended By:

Vice Provost, DELTA (if DE degree) (Printed Name and Signature)  Date

Approved By:

Dean of the Graduate School (Printed Name and Signature)  Date

Recommended By:

Dean's Council (Printed Name and Signature)  Date

Approved By:

Executive Vice Chancellor and Provost (Printed Name and Signature)  Date

Approved By:

Chancellor (Printed Name and Signature)  Date

(revised August 2015)