NTNU

Norwegian University of Science and Technology
Faculty of Economics and Management

DIPLOMA

Yerson Arboleda Correa

born 24 August 1989

has 9 October 2018 been awarded the degree

Master of Science in Engineering

Programme of Study: Project Management
Main profile: Civil Engineering

Thesis Title: A comparison of cost and time overrun causes in different road size projects

Average Degree Grade: C

The diploma is issued 1 November 2018.

Dean of Faculty

Faculty Officer

Originalvitnemålet er stemplet og signert av NTNU. The authentic academic diploma is stamped and signed by NTNU.

General information about the degree
Master of Science in Engineering is awarded in accordance with the Regulations on Degrees and Titles Protected by Law of 16 December 2005 (No. 1574). The nominal length of study for the degree is 2 years and it comprises 120 ECTS credits. One completed year of study has nominally 60 ECTS credits. Master of Science in Engineering is a qualification that is part of second cycle/level 7 in the Norwegian Qualifications Framework for Lifelong Learning, approved by the Ministry of Education and Research on 15.12.2011.

Objectives, content and organisation of the programme of study
The two-year Master's programme comprises a minimum of 120 ECTS credits, at least 60 of which must have been taken at this institution.
The master's programme Project Management provides the candidate with a technological background and a comprehensive understanding of the economic, managerial and environmental challenges linked to managing technology-oriented projects, in order to make him or her capable of analyzing, improving and implementing changes in their own organizations.

Project Management has three main components

- compulsory and elective courses within the project management field. In addition to these, the student must select 15 credits relevant for their technological specialization.
- the interdisciplinary project Experts in Teamwork (7.5 credits)
- the master's thesis, which is a written report of a piece of independent scholarly work. This component provides a total of 60 credits. Thesis work takes place under the guidance of an academic supervisor.

The teaching methods and activities of the programme include lectures, seminars and written assignments.

The candidate's learning outcomes
A candidate who has completed his or her qualification should have the following learning outcomes defined in terms of knowledge, skills and general competence:

Knowledge

- have broad mathematical-scientific, technological and computer-technical basis knowledge, which serves as a foundation for the comprehension of method, application, academic innovation and readjustment
- have broad scientific and research-based knowledge relating to engineering within one's elected field of technology, along with in-depth knowledge regarding a delimited field connected to current ongoing research. This entails having sufficient academic insight allowing for the employment of new research findings

Skills

- be able to define, shape and analyze complex engineering problems, which includes electing relevant models and methods, and carrying out calculations and solutions in an independent and critical manner
- be able to develop overall solutions pertaining to engineering problems, which includes developing solutions in an interdisciplinary context, and carrying out an independent, delimited engineering research or development work under academic supervision
- have sufficiently broad expertise within both technology and economic-administrative subjects, in order to be a bridge builder between the two fields at his or her workplace
- be able to academically innovate and readjust, which includes developing his or her academic competence on one's own initiative

General competence

- be able to understand the role of engineering in a comprehensive societal perspective, have insight in ethical requirements and consideration of sustainable development, and be able to analyse ethical problems connected to engineering work, and contribute to innovation and entrepreneurship
- have the ability to disseminate, communicate and cooperate interdisciplinary on engineering problems and solutions, to both specialists and the general public
- be able to understand possibilities and limitations when using information and communication technology, including juridical and societal aspects
- have the ability to lead and motivate co-workers, which includes having an international perspective on his or her profession, and developing the skills for international orientation and collaboration

NTNU

Transcript of Records

Norwegian University of Science and Technology

Name: **Arboleda Correa, Yerson**
Degree: Master of Science in Engineering
Study programme: Project Management
Main profile: Civil Engineering

Date of birth: 1989-08-24
Received: 2018-10-09

Course		Semester	Credits	Grade	Grade distribution [1] A B C D E
1 Year					
TBA4315	Economics of Transport Infrastructure	2016 autumn	7.5	B	
TBA5200	Project Planning and Analysis	2016 autumn	7.5	C	
TIØ5200	Project Organizations	2016 autumn	7.5	C	
PSY3809	Experts in Teamwork - Creative Means of Environmental Communication	2017 spring	7.5	E	
TIØ5210	Programme and Portfolio Management	2017 spring	7.5	C	
TIØ5215	Global Governance of Sustainable Supply Chains	2017 spring	7.5	C	
TBA4320	Traffic Safety and Risk Evaluation	2017 autumn	7.5	C	
TPK5100	Project Planning and Control	2017 autumn	7.5	C	
2 Year					
TBA4128	Project Management, Advanced Course	2017 autumn	7.5	B	
TBA4176	Real Estate and Property Management, Advanced Course	2017 autumn	7.5	C	
TBA4530	Project Management and Construction Engineering, Specialization Project	2017 autumn	15	C	
TBA4910	Project Management, Master's Thesis *A comparison of cost and time overrun causes in different road size projects*	2018 spring	30	B	

Total: 120.0

1 November 2018

Executive Officer

NTNU
NORWEGIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY
Student and Academic Division

1) For an explanation of the grade distribution, see the last page.

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Credit system and grading

The academic year normally runs from mid-August to mid-June and lasts for 10 months. Courses are measured in "studiepoeng", considered equivalent to the European Credit Transfer System standard (ECTS credits). The full-time workload for one academic year is 1500 - 1800 hours of study / 60 "studiepoeng".

The Norwegian grading system consists of two grading scales: one scale with the grades pass or fail and one graded scale from A to E for pass and F for fail. The graded scale has the following qualitative descriptions:

A	Excellent	An excellent performance, clearly outstanding. The candidate demonstrates excellent judgement and a very high degree of independent thinking.
B	Very good	A very good performance. The candidate demonstrates sound judgement and a high degree of independent thinking.
C	Good	A good performance in most areas. The candidate demonstrates a reasonable degree of judgement and independent thinking in the most important areas.
D	Satisfactory	A satisfactory performance, but with significant shortcomings. The candidate demonstrates a limited degree of judgement and independent thinking.
E	Sufficient	A performance that meets the minimum criteria, but no more. The candidate demonstrates a very limited degree of judgement and independent thinking.
F	Fail	A performance that does not meet the minimum academic criteria. The candidate demonstrates an absence of both judgement and independent thinking.

The assessment is criterion referenced.

Grade distribution

The distribution of grades is shown by the percentage for courses using the graded scale A – F. Fail (F) is not included in the distribution. All results from the last five years are included in the calculation. The distribution is also shown for courses that have been active for less than five years. There has to be at least 10 approved results during the period.