


























BACHELOR, 3rd Year - 1st Semester (S5) [JGC5ST0]

| UE | Course | ECTS | Language |
|--------|--|------|--|
| JGC5U1 | MECHANICS - MATERIALS | 7 | |
| | Perfect Fluid Mechanics Strength of Materials 1 Physics of Materials | |  |
| JGC5U2 | MATHS - COMPUTING - PHYSICS | 8 | |
| | Mathematics for Engineers Statistics & probabilities Waves and Vibrations Spreadsheets 1 | |  |
| JGC5U3 | TECHNOLOGY 1 | 10 | |
| | Laboratory work : Concrete 1 Reading of construction drawing 1 ; Autocad Introduction to Building & Public Works 1 Topography Health and Safety in the Workplace | |  |
| JGC5U4 | LANGUAGES AND SOCIAL SCIENCE, HUMANITIES, ECONOMICS, LAW I | 5 | |
| | General English Organization and operation of the companies Intercultural management Digital responsibility Opening module S5 English (TOEIC) | |  |






BACHELOR, 3rd Year - 2nd Semester (S6) [JGC6ST0]

| UE | Course | ECTS | Language |
|--------|---|------|---|
| JGC6U1 | MATERIALS Construction Materials 1 Introduction to Building & Public Works 2 Laboratory work : Concrete 2 | 6 |  |
| JGC6U2 | MATHS - TOPOGRAPHY Numerical analysis in Civil Engineering BIM 1 Town planning law Reading of construction drawing 2 | 6 |  |
| JGC6U3 | MECHANICS Strength of Materials 2 Elasticity Energy Methods for Strength of Materials Actions on structures | 6 |  |
| JGC6U4 | LANGUAGES AND SOCIAL SCIENCE, HUMANITIES, ECONOMICS, LAW II English (general & TOEIC) Opening Module Corporate finances Personal and professional project – 1 Sustainable development & social responsibility | 6 |  |
| JGC6U5 | WORK PLACEMENT I (Internship) | 6 |  |








MASTER, 1st Year - 1st Semester (S7) [JGC7ST0]

| UE | Course | ECTS | Language |
|---------------|---|-----------|---|
| JGC7U1 | DIMENSIONING 1 | 12 | |
| | Strength of Materials 3 | |  |
| | Structure behaviour 1 | |  |
| | Metallic Construction 1 | |  |
| | Reinforced Concrete 1 | |  |
| | Hydraulics | |  |
| JGC7U2 | SOILS | 8 | |
| | Soil Mechanics – geotechnics= | |  |
| | Numerical Analysis 2 | |  |
| | Geotechnical engineering (laboratory work) | |  |
| JGC7U3 | TECHNOLOGY 2 | 4 | |
| | Introduction to Building & Public Works 3 | |  |
| | Construction Material 2 | |  |
| | Organisation of civil engineering worksites | |  |
| | Road Infrastructure | |  |
| JGC7U4 | LANGUAGES AND SOCIAL SCIENCE, HUMANITIES, ECONOMICS, LAW III | 6 | |
| | English (general & TOEIC) | |  |
| | Project Management 1 | |  |
| | Commercial and marketing | |  |
| | Quality Management | |  |

MASTER, 1st Year - 2nd Semester (S8) [JGC8ST0]

| UE | Course | ECTS | Language |
|--------|--|------|---|
| JGC8U1 | DIMENSIONING 2 Reinforced Concrete 2 Behaviour of structures 2 Infrastructures and foundations Introduction to heat exchanges | 7 |  |
| JGC8U2 | TECHNOLOGY 3 Applied Numerical Analysis Method of execution: Formwork and Flooring BIM 2 ; Robot Metallic Construction 2 | 7 |  |
| JGC8U3 | METHODS Introduction to Building & Public Works 4 Financial evaluation of civil engineering worksites Final project Wood construction | 7 |  |
| JGC8U4 | LANGUAGES AND SOCIAL SCIENCE, HUMANITIES, ECONOMICS, LAW IV English (general & TOEIC) Responsible Management Innovation entrepreneurship 1 Career plan -2 | 4 |  |
| JGC8U5 | WORK PLACEMENT II (Internship) | 5 |  |

MASTER, 2nd Year - 1st Semester (S9) [JGC9ST0]

| UE | Course | ECTS | Language |
|------------------|--|------|---|
| JME9U1 | LANGUAGES AND SOCIAL SCIENCE, HUMANITIES, ECONOMICS, LAW V BIM 3 (specialized) Project Management 2 Sustainable Development in civil engineering Final year project English | 8 |  |
| JGC9U2 | TECHNOLOGY 4 Non-destructive testing Management of civil engineering contracts Study, design and optimization of buildings Financial Management of Worksites Construction & Public Markets Law | 6 |  |
| JGC9O1 JGC9U3 | OPTION/TRACK 1: BUILDINGS AND SUSTAINABLE DEVELOPMENT BUILDING Bioclimatic Construction Electrical Installation Acoustics of buildings | 6 |  |
| JGC9O1 JGC9U4 | OPTION/TRACK 1: BUILDINGS AND SUSTAINABLE DEVELOPMENT ENERGIES Advanced Heat Exchanges and Passive Systems Thermal and environmental behaviour of the building Energy Systems in Buildings STARCCM+ Modelling Numerical calculations of heat exchanges | 10 |  |
| JGC9O2 JGC9U5 | OPTION/TRACK 2: STRUCTURES AND WORKS DIMENSIONING 3 Reinforced Concrete 3 Prestressed Concrete Mixed Bridges Calculation of Structures | 8 |  |
| JGC9O2 JGC9U6 | OPTION/TRACK 2: STRUCTURES AND WORKS DESIGN OFFICES Structure Modelling using CASTEM Pathology and rehabilitation Earthquake engineering Research and development Project Advanced soil mechanics | 8 |  |
| JGC9O3 JGC9U7 | OPTION/TRACK 3: PUBLIC WORK DIMENSIONING 3 Reinforced Concrete 3 Tunnels and Dams Structures, industrial civil engineering Maritime Works | 8 |  |

JGC903
JGC9U7

**OPTION/TRACK 3: PUBLIC WORK
DIMENSIONING 3**

8

Research and development Project

Formwork and shoring



Methods of Earthwork/ Roads and Utilities Networks / Roads

Conferences on Public Works

Methods in civil engineering



MASTER, 2nd Year - 2nd Semester (S10) [JGC10ST0]

| UE | Main course | ECTS | Language |
|---------|---------------------------------|------|---|
| JGC10U1 | WORK PLACEMENT III (Internship) | 30 |  /  |