



COURSE: Technique of Road Railway and Airport Works

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website:

Language: Italian

ECTS: 9

n. of hours:81

Academic year: 2014-15

Campus: Potenza

Semester: 1th

TOPICS

Urban roads classification; design of vertical and horizontal signals; road safety; design of bicycle paths and of safety restraints for weak users; design of both one level and multi-level car parking respect to Italian Standards; design and dimensioning of structures for road infrastructures water disposal; realization of different bridge joints; design and construction of a freight village; planning of road maintenance; railway and airport maintenance; design of road and rail tunnels.

TEACHING METHODS (please tick one or more options)

X Theoretical lessons

Tutorials in classroom

Tutorials in laboratory

X Project works

Technical visits

Other activities (please specify) _____

TEXTBOOKS

Course notes provided by the professor.

ON-LINE EDUCATIONAL MATERIAL

web address: _____

LEARNING OUTCOMES

Acquire the theories and techniques aimed at the design, construction and management of parking, road and rail tunnels, cycle paths and all the necessary complementary works such as road signs. Acquire the tools aimed at planning and managing the maintenance of road infrastructures.

REQUIREMENTS

It is suggested to pass previously the exam of "*Principles of Roads, Railways and Airports*"

EVALUATION METHODS (please tick one or more options)

Intermediate verifications

Written examination

X Discussion of a project work

Practical test

X Oral examination

Other methods (please specify) _____

DETAILED CONTENT

Classification of urban roads: organization of the road section in urban areas respect to Italian Standards; the design and construction of vertical and horizontal signals; Road safety passive and active; accident analysis; The weak users and moderators of traffic; Design and construction of pedestrian crossings; Design of both one level and multi-level car parking; type of parking, design elements and insertion of parking in urban road network; technological systems in parking; design and construction of cycle paths; design and dimensioning of structures for road infrastructures water disposal; realization of different bridge joints; design and construction of a freight village; road and rail tunnels: preliminary investigations, project phases, excavation and construction techniques, technological systems of lighting and ventilation; street lighting; planning of road maintenance; Airport and railway maintenance; The metros: the metropolitan transport system in high-density areas, the civil works for underground and surface and construction techniques; The conduct of public works.

SEMINARS BY EXTERNAL EXPERTS YES NO



Università degli Studi della Basilicata
Scuola di Ingegneria

FURTHER INFORMATION

The didactic organization provides for 81 total hours of which 48 hours of lecture and 33 of practice.
