"GHEORGHE ASACHI" TECHNICAL UNIVERSITY OF IAŞI
FACULTY OF CIVIL ENGINEERING AND BUILDING SERVICES

MINISTERUL EDUCAȚIEI

CE.414

CE 414 - Special Steel Structures*

** a course recommended for 4th year students in Civil Engineering – training in English program*

What are they?

- particular types of civil engineering structures made of steel
- special in terms of: human occupancy, function, dynamic response, risk to society
- components of high order technical systems that are

CRITICAL FOR NOWADAYS SOCIETAL NEEDS

Why this course?

- for an increased understanding of the

INTERDEPENDENCE among:

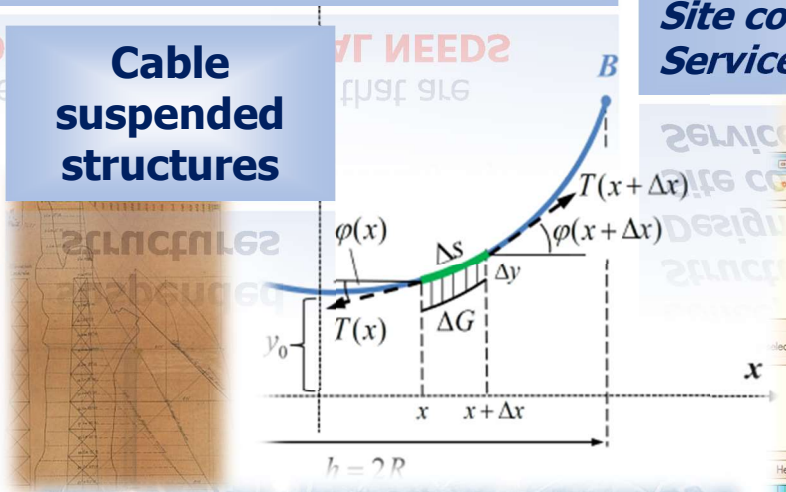
Conceptual design
Structural analysis
Design and detailing
Site construction
Service & Maintenance

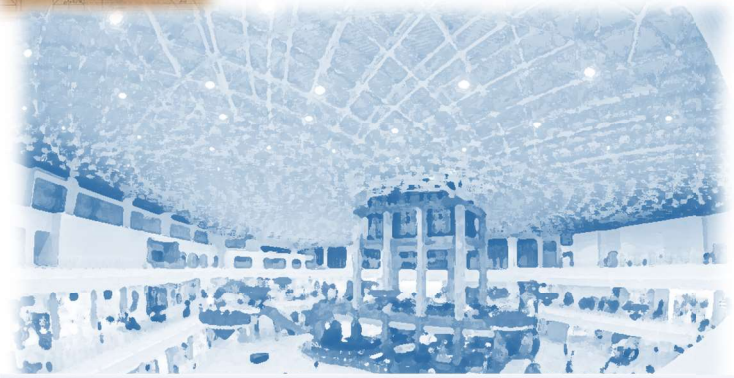
SYSTEM THINKING APPROACH

Appropriately state problems, find innovative solutions in a sustainability driven, continuous learning-based culture

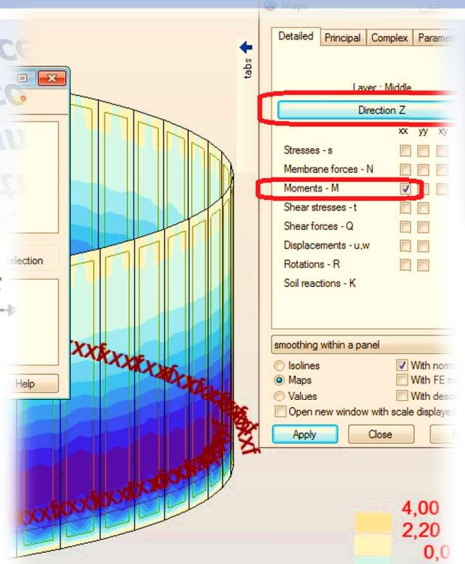
Space lattice towers

Cable suspended structures





Space frame structures



Steel storage structures

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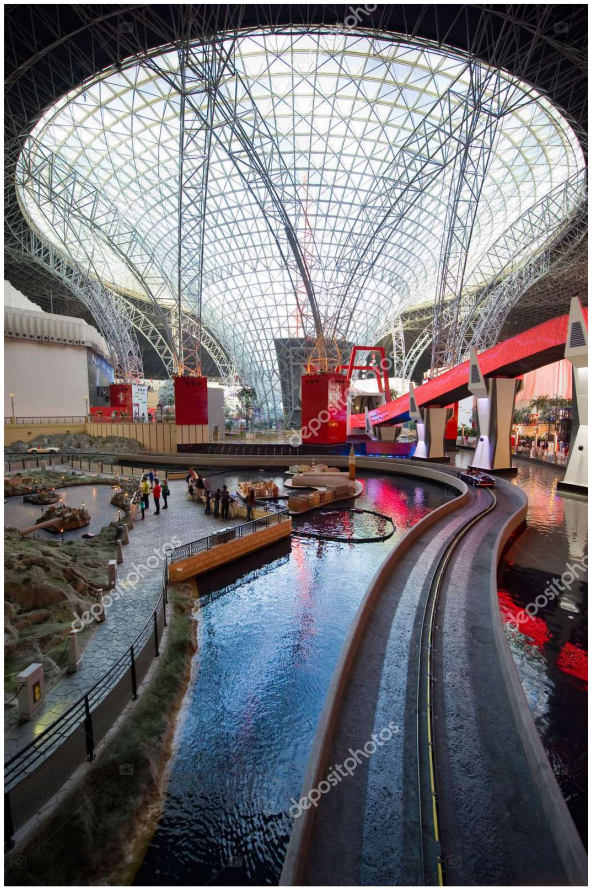
COLD FORMED STRUCTURAL STEEL MEMBERS

DEPARTAMENTUL CONSTRUCȚII CIVILE ȘI INDUSTRIALE

STEEL

Steel is a metal alloy composed of iron, carbon and few other elements	Has a higher weight
Not corrosion resistant and rusting occurs easily	Easily welded
A hard metal alloy with a high density	Has a very high melting point



ALUMINIUM

Aluminium is a soft metal with a silvery-gray color	Light-weighted metal
Resistant to corrosion and rusting	Somewhat difficult to be welded
A soft metal with relatively a low density	Has a lower melting point

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