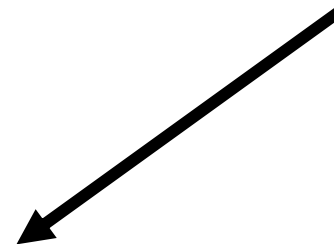
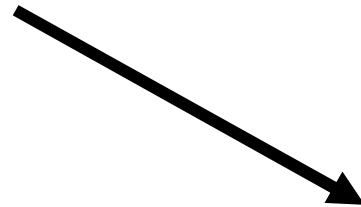
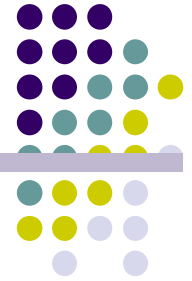


**WHAT IS A
CIVIL
ENGINEER ?**

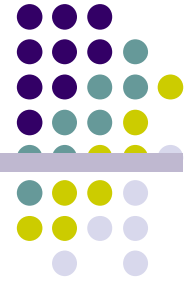
**EU RULES
FOR
MOBILITY**



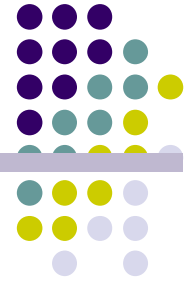
**ECCE
PROPOSAL**



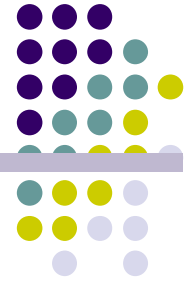
WHAT IS A CIVIL ENGINEER ?



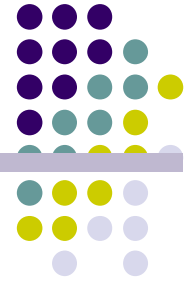
**IT IS A PROFESSIONAL THAT
PERFORMS
CIVIL ENGINEERING ACTS**



1. WHAT WE DO



WHAT ARE THE CIVIL ENGINEERING ACTS?



1. DESIGN

1.1. STRUCTURES

1.2. BUILDING PHYSICS

1.3. BUILDING PIPING

1.4. GEOTECHNICAL SOLUTIONS

1.5. COMMUNICATION INFRASTRUCTURES

1.6. URBAN PLANING

1.7. WATER AND SANITARY NETS

1.8. RIVER AND SEA STRUCTURES

1.9. GLOBAL SAFETY



2. CONSTRUCTION

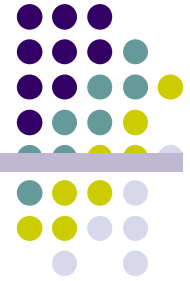
- 2.1. TECHNICAL DIRECTION**
- 2.2. CONSTRUCTION MANAGEMENT**
- 2.3. CONSTRUCTION CONTROL**
- 2.4. MATERIALS PRODUCTION**
- 2.5. SAFETY AND HEALTH**
- 2.6. MAINTENANCE**



3. MANAGEMENT

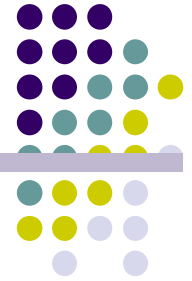
3.1. BUILDING INVESTMENTS MANAGEMENT

3.2. BUILDING ECONOMICS EVALUATION



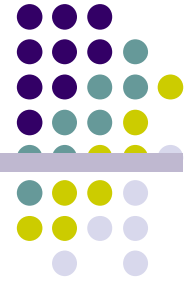
THE ACTS ARE USUSALLY ASSOCIATED IN TYPICAL ENGINEER PROFILES

- DESIGN OF STRUCTURES AND GEOTECHNICS**
- DESIGN OF COMM. INFRAST. AND URBAN PLANNING**
- DESIGN OF HYDRAULICS**
- DESIGN OF BUILDING PHYSICS AND PIPING**
- CONSTRUCTION**



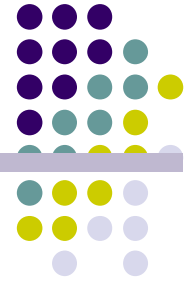
**FOR EACH OF THESE ACTS
THERE ARE
LEVELS OF DIFFICULTY**

EXAMPLE: LEVELS A,B,C

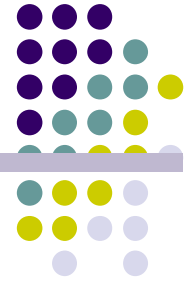


HOW TO CLASSIFY THE LEVEL OF DIFFICULTY ?

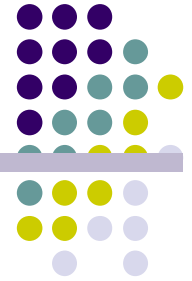
- COST**
- TECHNICAL DETAILS**



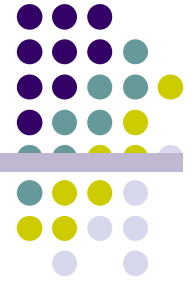
2. WHAT WE KNOW



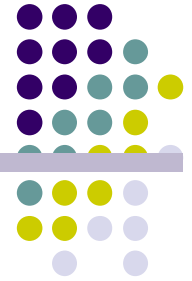
**HOW DO WE LEARN
HOW TO PERFORM
THESE ACTS ?**



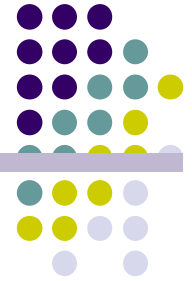
**ACADEMIC
KNOWLEDGE
+
EXPERIENCE
+
COURSES**



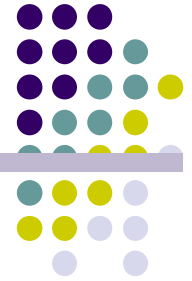
3. WHAT DISTINGUISH US



**BASED ON THIS WE CAN
CLASSIFY THE ENGINEERS,
FOR EACH ACT,
IN LEVELS a, b, c**



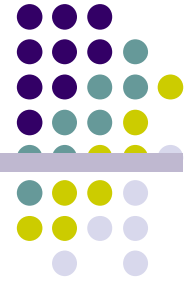
HOW TO CLASSIFY ENGINEERS LEVELS FOR THE ACTS



**ACADEMIC KNOWLEDGE
= BASIC KNOWLEDGE**

**BACHELOR 3- 4 YEARS
FEW ACTS / LOWER TECHNICAL
LEVEL A**

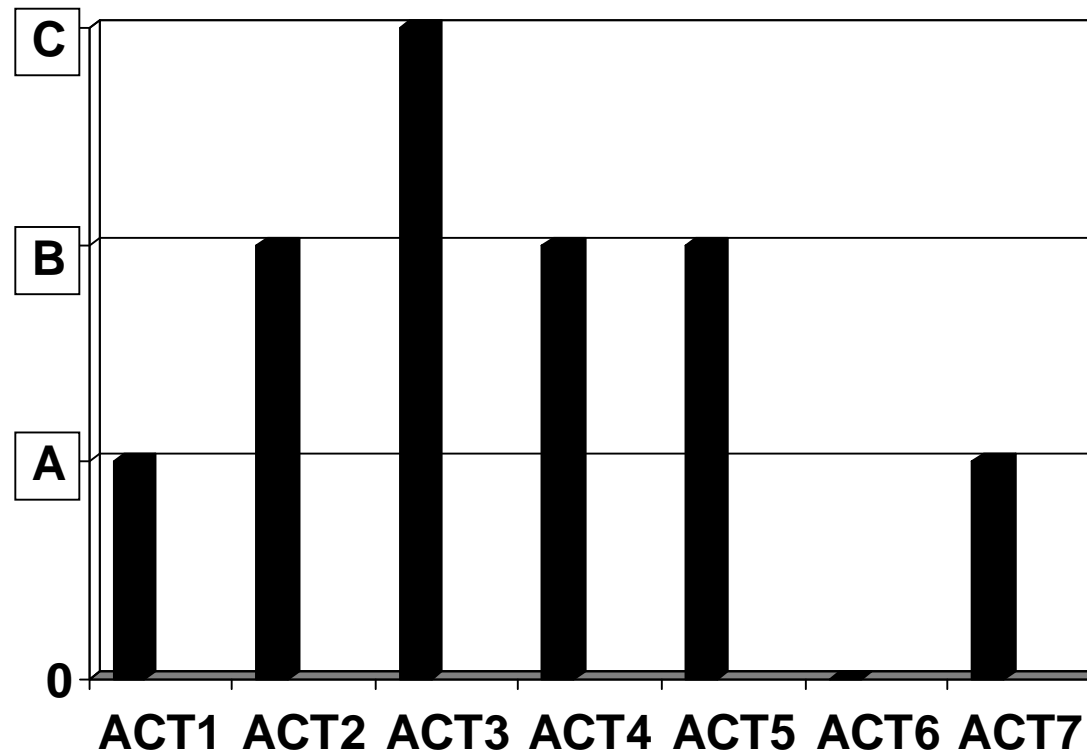
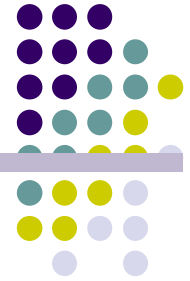
**MASTER 1-2 YEARS
MORE ACTS/ HIGHER TECHNICAL
LEVEL B**



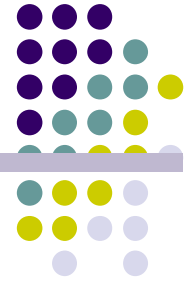
**EXPERIENCE
+
KNOWLEDGE**

SPECIALIST

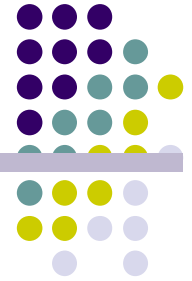
LEVEL C



ENGINEER PROFILE WITH EXPERIENCE



4. WORK TO BE DONE



SUMMARY

WE NEED:

- TO DEFINE THE ACTS;**
- TO DEFINE THE LEVELS OF THE ACTS;**
- TO DEFINE PROFILES;**
- TO DEFINE THE LEVELS OF ENGINEERS.**