



# UNIVERSITÀ DEGLI STUDI DI PALERMO

**Department: Earth and sea sciences**

**A.Y. 2015/2016**

## **DEGREE COURSE IN GEOLOGY - GEOLOGICAL SCIENCES -**

### **Characteristics**



Class of Bachelor's Degree  
(BSc) on Earth sciences  
(L-34)



3 YEARS



PALERMO



PLANNED ACCESS



2126

### **Educational objectives**

The 1st cycle degree course in geology aims at providing students with basic groundings in Earth Sciences, constituting a valid support to field and laboratory operations and to the reading and interpretation of technical-scientific papers. Such a training, open to further refinements in higher level courses (2nd cycle Degrees, University Master Courses, PhDs) enables graduates to fit in work and professional activities.

The specific objectives are related to the creation of competences in the field of Earth Sciences and namely the acquisition of basic geological knowledge, of the tools and methods for geological, geomorphological, geochemical, mineralogical-petrographic, geophysical and applied geological research, through laboratory and field activities.

The educational activities include:

- Lectures, theoretical and practical exercises, laboratory practice, field practice. Each activity will be awarded with and adequate amount of credits;
- Seminars, group works, technical visits and internship in external public or private facilities: agencies, laboratories, companies, professional offices, yards;
- Stays in other Italian and foreign university , under international agreements too.

### **Professional opportunities**

The professional profile trained through this degree course is a technician with competences and operating skills in the following areas:

- Geotechnical and geological diagnostic businesses, companies and professional offices;
- Agencies in the field of oil research, water, geothermal, mineral and industrial research;
- Regional agencies for environment protection and for the search for sustainable energy sources;
- Regional agencies for the prevention and mitigation of geological risks (volcanic, seismic, hydrogeological risk) and environmental risks (pollution, town and industrial waste disposal);
- Regional agencies for cultural heritage upgrading, or for the management of natural science museums;
- industry of ceramics, refractory materials, ornamental stones, cement, glass and gems;
- Testing laboratories and certification of geological materials;
- Universities and public and private research institutions as qualified technicians

### **Final examination features**

The final examination consists of the presentation and discussion of a written paper prepared under the guidance of a supervisor. The paper, which might be an experimental one, must be related to issues related to class specific subjects and their application. The final examination might be related to field and/or internship activities. The quality of the paper will be evaluated for the expression of the final mark.

| Subjects 1 ° year  | CFU | Sem. | Val. | SSD     | TAF |
|--|-----|------|------|---------|-----|
| 16461 - GENERAL AND INORGANIC CHEMISTRY<br>WITH ELEMENTS OF ENVIRONMENTAL CHEMISTRY<br>- INTEGRATED COURSE | 10  | 1    | V    |         |     |
| - ELEMENTS OF ENVIRONMENTAL CHEMISTRY<br>Maccotta(RU)  | 3   | 1    |      | CHIM/12 | C   |

Legenda: Per. = periodo o semestre, Val. = Valutazione (V=voto, G=giudizio), TAF= Tipologia Attività Formativa (A=base, B=caratterizzante, C=Affine, S=stages, D=a scelta, F=altre)

| Subjects 1 ° year                                       | CFU | Sem. | Val. | SSD     | TAF  |
|---|-----|------|------|---------|------|
| - GENERAL AND INORGANIC CHEMISTRY<br><i>Casella(RU)</i> | 7   | 1    |      | CHIM/03 | A    |
| 04872 - MATHEMATICS<br><i>Spilla(PC)</i>                | 9   | 1    | V    | MAT/03  | A    |
| 11719 - PHYSICAL GEOGRAPHY<br><i>Rotigliano(PO)</i>     | 6   | 1    | V    | GEO/04  | B    |
| 04677 - ENGLISH LANGUAGE                                | 4   | 1    | G    |         | E, F |
| 10700 - GEOINFORMATICS<br><i>Madonia(PC)</i>            | 6   | 2    | V    | INF/01  | A    |
| 09635 - MINERALOGY WITH LABORATORY<br><i>Merli(PA)</i>  | 9   | 2    | V    | GEO/06  | A    |
| 08557 - PHYSICS<br><i>Vetri(PO)</i>                     | 9   | 2    | V    | FIS/07  | A    |
| 03043 - FIELD TRIPS - I YEAR                            | 1   | 2    | G    |         | F    |

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| Subjects 2 ° year  | CFU | Sem. | Val. | SSD    | TAF |
|--|-----|------|------|--------|-----|
| 03334 - EARTH PHYSICS<br><i>Martorana(PA)</i>                  | 6   | 1    | V    | GEO/11 | B   |
| 03589 - GEOCHEMISTRY WITH LABORATORY<br><i>Valenza(PO)</i>     | 6   | 1    | V    | GEO/08 | B   |
| 16673 - GEOLOGY I WITH LABORATORY<br><i>Di Stefano(PO)</i>     | 9   | 1    | V    | GEO/02 | A   |
| 03694 - GEOMORPHOLOGY WITH LABORATORY<br><i>Di Maggio(PA)</i>  | 9   | 2    | V    | GEO/04 | B   |
| 05509 - PALAEONTOLOGY WITH LABORATORY<br><i>Di Stefano(PO)</i> | 9   | 2    | V    | GEO/01 | B   |
| 05674 - PETROGRAPHY WITH LABORATORY<br><i>Rotolo(PO)</i>       | 9   | 2    | V    | GEO/07 | B   |
| 03041 - FIELD TRIPS - II YEAR                                  | 2   | 2    | G    |        | F   |
| Free subjects (suggested)                                      | 6   |      |      |        | D   |

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| Subjects 3 ° year  | CFU | Sem. | Val. | SSD    | TAF |
|--|-----|------|------|--------|-----|
| 17521 - ELEMENTS OF SEDIMENTARY<br>SEDIMENTOLOGY AND PETROGRAPHY | 6   | Ann. | V    |        |     |
| - SEDIMENTARY PETROGRAPHY<br><i>Scopelliti(PA)</i>               | 3   | 1    |      | GEO/07 | C   |
| - SEDIMENTOLOGY<br><i>Agate(PA)</i>                              | 3   | 2    |      | GEO/02 | C   |
| 09527 - GEOLOGY II WITH LABORATORY<br><i>Sulli(PO)</i>           | 9   | 1    | V    | GEO/02 | B   |
| 16171 - GEORESOURCES<br><i>Montana(PA)</i>                       | 6   | 1    | V    | GEO/09 | C   |
| 13351 - ADVANCED SKILLS RELATED TO THE<br>LABOUR MARKET          | 6   | 1    | G    |        | F   |
| 13121 - PRACTICE   | 8   | 1    | G    |        | F   |
| 17696 - APPLIED GEOLOGY - INTEGRATED COURSE                      | 9   | 2    | V    |        |     |
| - APPLIED GEOGRAPHY AND HYDROGEOLOGY<br><i>Monteleone(CU)</i>    | 6   | 2    |      | GEO/05 | B   |
| - APPLIED GEOLOGY - LABORATORY<br><i>Monteleone(CU)</i>          | 3   | 2    |      | GEO/05 | C   |
| 06278 - GEOLOGICAL SURVEY - INTEGRATED<br>COURSE                 | 9   | 2    | V    |        |     |

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| Subjects 3 ° year   | CFU       | Sem. | Val. | SSD    | TAF |
|---|-----------|------|------|--------|-----|
| - CARTOGRAPHY AND SURVEYING TECHNIQUE WORKSHOP<br><i>Pepe(PA)</i> | 6         | 2    |      | GEO/02 | B   |
| - GEOLOGICAL SURVEYING FIELD<br><i>Pepe(PA)</i>                   | 3         | 2    |      | GEO/02 | C   |
| 16168 - VOLCANOLOGY<br><i>Aiuppa(PO)</i>                          | 7         | 2    | V    | GEO/08 | B   |
| 03042 - FIELD TRIPS - III YEAR                                    | 1         | 2    | G    |        | F   |
| 05917 - FINAL EXAMINATION   | 3         | 2    | G    |        | E   |
| Free subjects II  | 6         |      |      |        | D   |
|   | <b>70</b> |      |      |        |     |

## OPTIONAL SUBJECTS

| Free subjects (suggested)                                   | CFU | Sem. | Val. | SSD    | TAF |
|---|-----|------|------|--------|-----|
| 02914 - PRINCIPLES OF SEISMOLOGY<br><i>D'Alessandro(PC)</i> | 6   | 2    | V    | GEO/11 | D   |