

## Blended Intensive Programme (BIP)

### COMOON - CONSTRUCTION ON THE MOON

*A journey through science and innovation to build the future*

at University "G. d'Annunzio" Viale Pindaro, 42

Campus in Pescara - Italy

6-11 July 2026 - 3 ECTS

#### **Theoretical lessons - on-line (32h)**

- 1) 30/06 – from 09:00 to 1:00 p.m. – Planetary Geology and Space exploration through Man and Robots (4h) **Francesca Mancini & Francesco Salese**
- 2) 30/06 – from 3:00 to 7:00 p.m. – Structural mechanics (4h) **Konstantinos Spiliopoulos**
- 3) 01/07 – from 09:00 to 1:00 p.m. – Reliability Methods in Soils and Rocks (4h) **Wojciech Pula**
- 4) 01/07 – from 3:00 to 5:00 p.m. – Rock Mechanics and Laboratory testing (2h) **Giovanna Vessia**
- 5) 01/07 – from 5:00 to 7:00 p.m. – Lava Tube Stability (2h) **Marcin Chwala**
- 6) 02/07 – from 9:00 to 1:00 p.m. – Lunar and Martian habitat and Space Architecture (4h) **Giuseppe Calabrese**
- 7) 02/07 – from 3:00 to 7:00 p.m. – Building structures through 3D printing (4h) **Valentino Sangiorgio & Alessandro Ricciutelli**
- 8) 03/07 – from 9:00 to 11:00 a.m. – Mineralogy and Petrography of construction materials (2h) **Radica Francesco & Gianluca Iezzi**
- 9) 03/07 – from 3:00 to 5:00 p.m. – Geotechnical Problems in the Design of a Permanent Lunar Habitat (2h) **Francesco Cafaro**
- 10) 03/07 – from 5:00 to 7:00 p.m. – Reliability Geological Models in Space (4h) **Joanna Pieczynska-Kozłowska**

#### **Practice Session – in presence (28h)**

06/07 - 7:30 p.m. Welcome party!

- 07/07 – from 09:00 to 1:00 p.m. – Geomorphological Analysis through GIS (4h) **Francesca Mancini, Lorenzo Dezio & Valerio Piattelli**
- 07/07 – from 03:00 to 7:00 p.m. – 3D virtual reality (VR) headset to visualize scenes on the Moon (4h) **Jacub Morawski & Monica Pondrelli**
- 08/07 - from 09:00 to 1:00 p.m. – Multispectral data Analyses on GIS environment (4h) **Clara Guth**
- 08/07 – from 03:00 to 7:00 p.m. – Structural mechanics (4h) **Konstantinos Spiliopoulos**
- 09/07 – from 09:00 to 1:00 p.m. – Geotechnical problems in designing permanent lunar habitat (4h) **Marek Kawa**
- 09/07 - from 03:00 to 7:00 p.m. – Reliability Geological Models in Space (4h) **Joanna Pieczynska-Kozłowska**

**In situ experience – in presence (16h)**

- 10/07 – from 09:00 to 1:00 p.m. – Using 3D printers in lab (4h) **Alessandro Ricciutelli & Valentino Sangiorgio** – LAB at Pescara Campus
- 10/07 – from 03:00 to 7:00 p.m. – Lab tests on rocks (4h) **Giovanna Vessia & Marek Kawa** – LAB at Chieti Campus
- 11/07 - One-day field trip to the Abruzzo Astronomic Observatory – Campo Imperatore (8 h) - **GranSasso - (L'Aq) – Monica Pondrelli & Lorenzo Dezio**