



UNIVERSIDADE DE
COIMBRA



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Erasmus Plus GeoPlaNet Strategic Partnership

IO4: Open educational resource on career prospects
for students of astrophysics and planetary sciences

REPORT

OUTLINE

The goal of IO4 was to produce a web platform gathering information on requirements for application to MSc courses and on their program contents, in such a way as to help to promote master courses on astrophysics and planetary sciences at the partner institutions. There was also a special concern to present professional opportunities (in research and academia or business) after a MSc degree in these fields.

The target groups of the platform are mainly 1st cycle students, but also secondary students looking for information when applying for higher education.

This document has been prepared by the University of Coimbra in collaboration with the whole consortium of the Erasmus+ Strategic Partnership GeoPlaNet-SP (ref. 2020-1-FR01-KA203-079773).

DESCRIPTION OF THE INTELLECTUAL OUTPUT

The main materials used to build the IO4 platform, were obtained during the activity led by the University of Coimbra (UC), the Workshop 'Sciences and Technologies for Space – a ground-up overview' (WS Sci&Tech for Space), which took place remotely from 13 to 17 September 2021, using the Airmeet platform (<https://www.airmeet.com/e/48495850-ff8d-11eb-b718-31bbc3b6e1b2>). These materials consisted in video clips, text extracts, slides of presentations, graphics, etc.

Together with the companies 'Digital in Store' and 'Maria Adelaide', the UC team used the collected workshop material, complemented with other material provided by the partners, or collected on the internet, to interlink information on Planetary Sciences master courses and professional opportunities, in a way to facilitate an effective navigation for prospective candidates. In this process, 'Digital in Store' and 'Maria Adelaide' could incorporate concepts and navigation techniques inspired in actual successful web services, to turn it into an appealing and interesting experience through a custom and bespoke web design and web development specific to this platform and project, in co-development with the UC team. In fact, the videos collected during WS Sci&Tech for Space, contain not only up-to-date scientific content, but also the feedback, testimonials, and personal experience from researchers and both academia and industry professionals.

The platform was named **geoplanet.space** and its web address/URL is <https://geoplanet.space/>. It was planned to be a dynamic output, with the possibility to be updated by the members of the GeoPlaNet partnership.

Platform Architecture

The website design is responsive, and suitable to access from smartphones (smaller screens), tablets (medium screens), and laptops and desktops (bigger screens). It is built on WordPress CMS, with a custom and responsive bespoke theme built on HTML5 and modern standards, and with customization on the Admin with a plugin to support all the different types of content and fields for this website. Therefore, the contents of the website are editable on a back-office for ease of updates, tweaks, and content expansion.

This required appropriate hosting capable of:

- Web Server (HTTP/HTTPS) with a valid SSL and PHP Support.
- MySQL or Postgre SQL compatible database/database server.
- Having currently supported versions for all the components supporting the website.
- Providing valid SMTP configuration to include in WordPress to support email sending.
- Secure FTPS or SFTP access to the web server.

Platform Contents and Structure

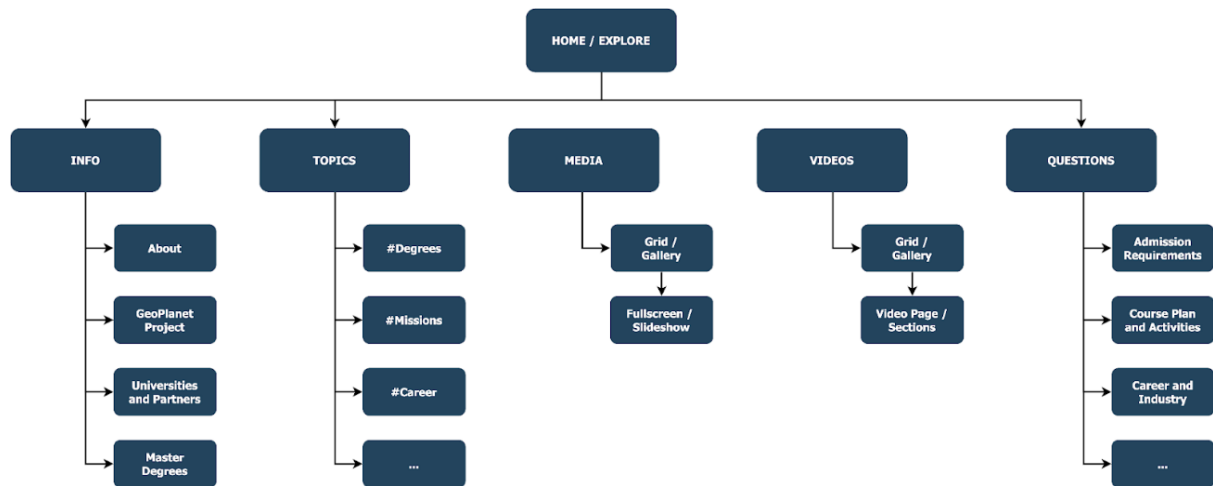
The website displays information organized into 5 different main areas:

- **PAGES / Content Pages**, which are editorial pages, supported by a rich block editing system with several types of content blocks.
- **VIDEOS / Workshop Videos**, which have subtitles and can have several:
 - **SECTIONS / Video Sections**, which are unique parts of a video with a specific start time and end time. The videos displayed in this area were produced during the WS Sci&Tech for Space.
- **QUESTIONS**, which are succinct pairs of a question and an answer. Answers provide rich text editing to format the text and add links.
- **MEDIA ITEMS**, which can be either a video, an image or a (downloadable) file, accompanied with a caption to provide further assets to promote the geoplanetary sciences field, projects and programs.

All these contents should/can be tagged with:

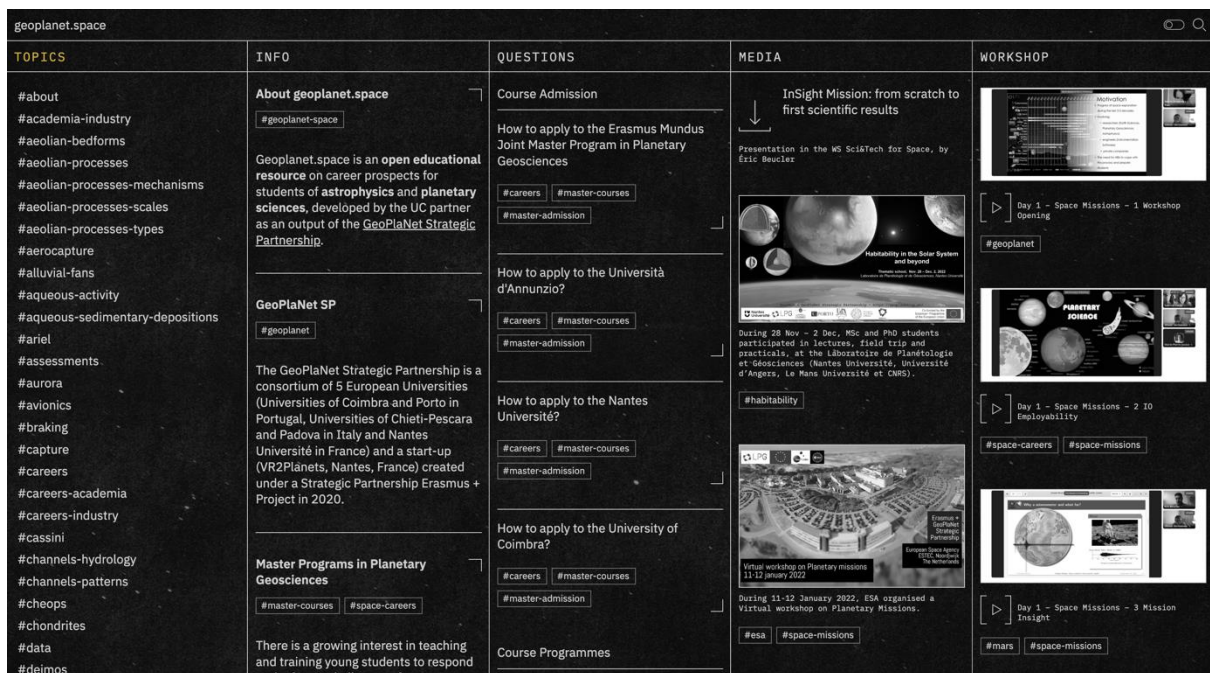
- **TOPICS**, which are **assorted terms** to tag any type of the above-mentioned content. The website is specifically designed for the use of topics, to provide content discoverability and organisation. Also note:

Below, we can find a scheme of the structure for the **geoplanet.space** platform:



Screenshots of geoplanet.space platform

The global view



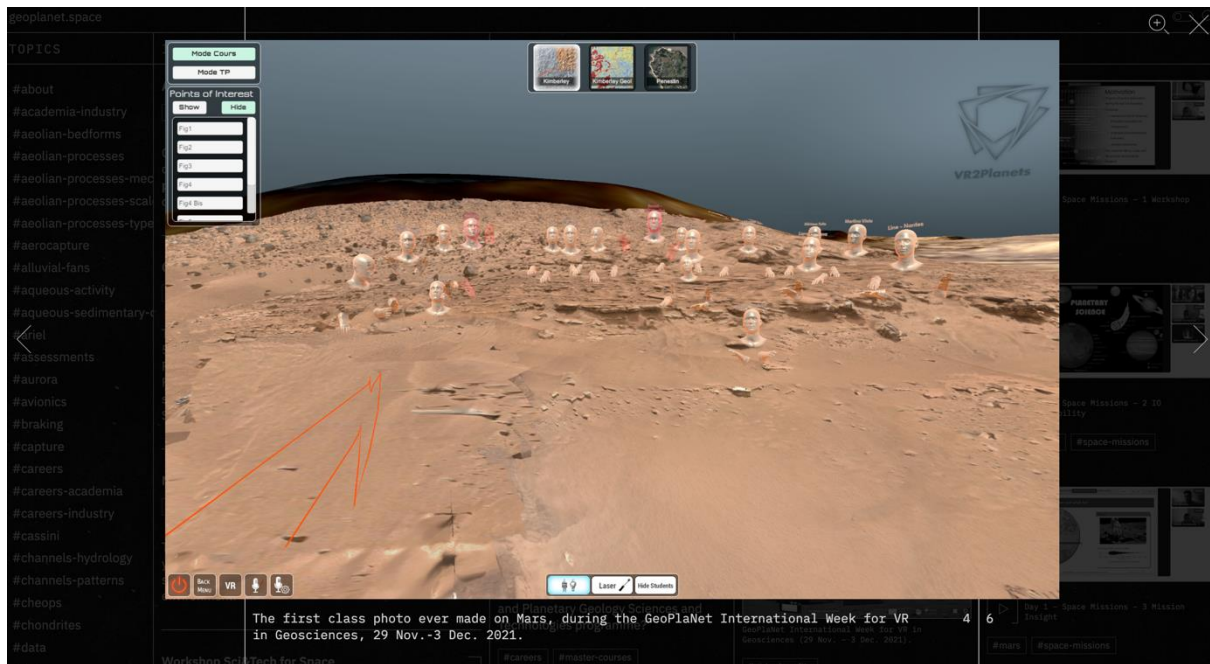
On choosing the topic #careers, only a selection of related materials appears:

The screenshot shows the geoplanet.space website interface. The 'TOPICS' column on the left lists various hashtags, with '#careers' selected. The 'INFO' column displays 'No results found'. The 'QUESTIONS' column contains three entries: 'Course Admission', 'How to apply to the Erasmus Mundus Joint Master Program in Planetary Geosciences', 'How to apply to the Università d'Annunzio?', 'How to apply to the Nantes Université?', and 'How to apply to the University of Coimbra?'. Each entry includes tags for '#master-admission', '#master-courses', and '#careers'. The 'MEDIA' column shows 'No results found'. The 'WORKSHOP' column features video thumbnails and titles such as 'Section - teaching to solve problems is ultimately teaching the fundamentals of the subject concerned' and 'Section - examples of training profiles of students in astrophysics and planetology at the university of Coimbra'.

On choosing the INFO entry 'GeoPlaNet SP', information on this subject is displayed:

The screenshot shows the geoplanet.space website interface with the 'INFO' column selected. The title 'GeoPlaNet SP' is prominently displayed. Below the title is a hashtag '#geoplanet'. The main text describes the consortium: 'A consortium of 5 European Universities (Universities of Coimbra and Porto in Portugal, Universities of Chieti-Pescara and Padova in Italy and Nantes Université in France) and a start-up (VR2Planets, Nantes, France), was created in 2016, with the aim to promote research, education and training in Planetary Geosciences at an international level. The consortium is coordinated by the Nantes Université.' Below this, the 'Main pursued goals:' are listed as a bulleted list: 'structuring and internationalising research and training', 'strengthening excellence in Geoplanetary Sciences', 'increasing cooperation among partners and with industry and private companies', and 'providing multidisciplinary environment'. At the bottom, it states: 'A larger group of ~20 partners, among space agencies, research centres, private companies, supports this consortium.'

The MEDIA column shows images, videos, or downloadable files, and its respective caption:



Finally, the WORKSHOP column shows the videos of all communications during the WS Sci&Tech for Space, with a horizontal time axis where different segments of the video can be picked. These segments can also be selected using the column on the right.

