

## 3D PRINT REPORT

SCHOOL	COUNTRY
Special Vocational High School of Acharnes	Greece
PROJECT NAME	Mentor
Ancient Greek Temple Long	Ioannis Petrou
STUDENT NAMES	DATE
<ul style="list-style-type: none"> <li>• Andreas Vasilakis</li> <li>• Eleni Papadaki</li> <li>• Nikos Georgiou</li> <li>• Sophia Antoniou</li> <li>• Maria Kotsou</li> <li>• George Petrakis</li> <li>• Katerina Alexiou</li> <li>• Ioannis Marinos</li> <li>• Anastasia Katsarou</li> <li>• Christina Stefanou</li> </ul>	May 2024

<b>A type of 3D printer</b>	3D Printer Ender-3 V2 Neo
<b>Used material</b>	PLA
<b>Filament diameter</b>	1.75mm
<b>3D CAD program</b>	Blender
<b>SLICER programs for 3D</b>	Cura

## SUBJECT OF MODELING ON THE TOPIC OF TRADITIONAL CRAFT AND CULTURAL HERITAGE

For this project, the students chose to model and print a simplified ancient Greek temple. Ancient Greek temples are essential representations of Greek architectural heritage, symbolizing the advanced engineering and cultural values of ancient Greece. These temples, primarily built to honor various gods and goddesses, were central to the religious and social activities of Greek city-states.

The selected temple design captures the classical elements of Greek architecture, such as columns, pediments, and symmetry. This specific temple was designed to be more elongated and slender. It showcases columns that are taller and more numerous, reflecting the elegance and decorative nature of the Ionic order. The project aimed to faithfully reproduce these elements to provide a tangible connection to ancient Greek culture. Through this project, students not only honed their technical skills but also developed a greater appreciation for the cultural and historical significance of these iconic structures.

## DESCRIBE THE WORK PROCESS

The creation process for the selected item was a collaborative effort led by a mentor and involving ten students. The work was structured as follows:

**Formation of Working Group:** The team was divided into smaller groups, each assigned specific roles and tasks to ensure efficient workflow and effective collaboration.

**Selection of Heritage Object:** The group carefully selected a culturally significant object that represented traditional craftsmanship and cultural heritage.

**Field Study:** An initial field study was conducted to gather detailed information of the selected heritage object.

**3D Modeling:** Using Blender, the students created a detailed 3D model of the object. This stage involved iterative design and refinement to capture the essential features of the heritage object.

**Preparation for 3D Printing:** The completed 3D model was then prepared for printing using Cura, ensuring all necessary supports and settings were correctly configured.

**3D Printing:** The printing process was carried out using the 3D Printer Ender-3 V2 Neo with PLA filament of 1.75mm diameter. The printing was carefully monitored to ensure quality



and precision.

**Post-Processing:** After printing, the components were cleaned and any support structures were removed.

This comprehensive process ensured that the students not only developed technical skills but also gained a deeper appreciation for the cultural and historical significance of the heritage object they modeled.

## DESCRIBE ANY DELAYS AND/OR INCIDENTS

During the project, we encountered several delays and incidents that impacted the timeline. Communication issues with the schools were a significant challenge, often due to the availability of key personnel and the complexity of organizing schedules. Bureaucratic processes also contributed to delays, as approvals and coordination between different parties took longer than anticipated.

Despite these setbacks, the team committed to completing the project, ensuring high-quality outputs that reflect the rich cultural heritage we aimed to preserve and promote.

