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## THE ISSUE & OBJECTIVE

On a large campus like UCD, finding specific lecture rooms, buildings, or facilities can be a real challenge, especially for first-year students or visitors. EcoNav addresses this problem directly by providing an interactive 3D map that offers precise, step-by-step directions to every room and building on campus. The UCD EcoNav app aims to transform how students and staff navigate the campus, while promoting a more sustainable commuting practices.

 More precise and interactive features aim to facilitate campus navigation. This enables students and visitors to get to where they need to more efficiently.

 To promote more eco-friendly travel practices for the reduction of car dependence, decreasing congestion, and encouraging the use of sustainable transportation modes including walking, cycling, or public transport.

## WHAT IS ECONAV?

EcoNav is an interactive and user-friendly app that goes beyond basic navigation tools. It offers three key features: precise navigation, a tool to locate free study spaces on campus, and a travel point system that rewards slow transportation choices.

### DETAILED ROUTE GUIDE

By integrating Google Earth's 3D mapping for outdoor navigation and a community-created 3D model for building interiors, EcoNav ensures a seamless journey to any room, even in places you've never visited before.

#### NAVIGATION:

Simply search for a lecture hall or building and customize your route preferences. Want to avoid the rain? Activate the rain-protection filter to ensure your path keeps you dry all the way. The

app also provides real-time updates on your route, including notifications about roadblocks or closures, offering the most efficient path based on your preferred mode of transport.

## STUDY PLACE AVAILABILITY

EcoNav includes a direct connection to the library seat reservation system and expands the search to study areas outside the libraries. Using seat occupancy sensors, the app provides real-time updates on seat availability in nearby areas or specific buildings of interest. The app also features filters for group work, allowing users to find multiple adjacent seats for collaborative study sessions.

## TFI - POINT SYSTEM

EcoNav encourages eco-friendly travel by rewarding sustainable choices, such as walking or cycling to, and within the campus. Users earn points that can be redeemed for LeapCard credits through the TFI top up button. This system motivates users to opt for greener transportation options and leave their cars behind.

#### EARNING POINTS:



**8 points per kilometer**  
(12.5 km = 100 points = €1)



**4 points per kilometer**  
(25 km = 100 points = €1)



Detailed Route Guide

Study Place Availability

TFI - Point System

Image Sources:

Google Earth

O'Neill, S. and SON Photographic (2019). UCD Moore Building. UCD University Relations Gallery

wild3d (2018). Key Features of an Indoor Mapping Solution. Medium

## ADDITIONAL FEATURES

### Ratings

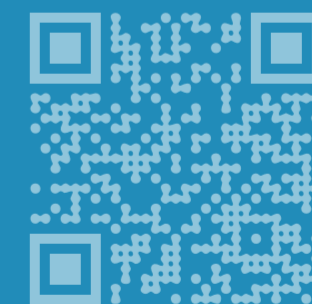
Users can actively contribute by providing feedback to help improve and update the routes.

### Timetable Mode

Connecting EcoNav to the SISWeb timetable: automatically suggests routes to the lecture halls/rooms as per the timetable.

### Choose Your UNIVERSITY

EcoNav includes a drop-down menu to select your university campus. To ensure security and privacy, users must verify their identity as staff or students to access the full campus database. This feature becomes essential when EcoNav expands its services beyond UCD to multiple universities.



\*The app does not exist, do not scan, do not download

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