



KUTAISI  
INTERNATIONAL  
UNIVERSITY

# PARTICLE THERAPY MASTERCLASS

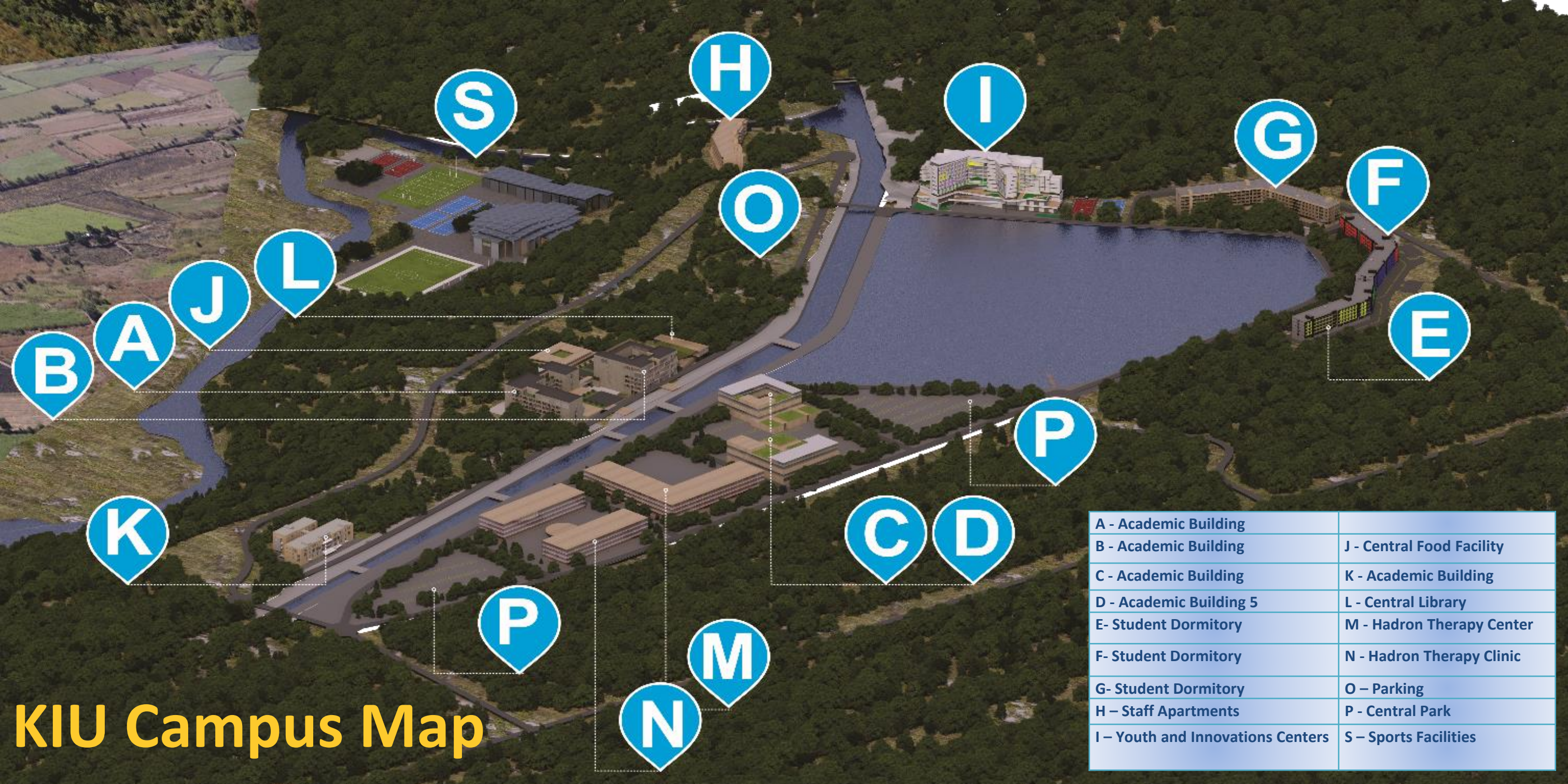
KUTAISI INTERNATIONAL UNIVERSITY

Kutaisi University Campus, Kutaisi, Georgia

24 March, 2023

# CAMPUS





# KIU Campus Map

|                                   |                           |
|-----------------------------------|---------------------------|
| A - Academic Building             | J - Central Food Facility |
| B - Academic Building             | K - Academic Building     |
| C - Academic Building             | L - Central Library       |
| D - Academic Building 5           | M - Hadron Therapy Center |
| E- Student Dormitory              | N - Hadron Therapy Clinic |
| F- Student Dormitory              | O – Parking               |
| G- Student Dormitory              | P - Central Park          |
| H – Staff Apartments              | S – Sports Facilities     |
| I – Youth and Innovations Centers |                           |





ACADEMIC BUILDINGS



ქუთაისის  
საერთაშორისო  
უნივერსიტეტი



**AUDITORIA AND CONFERENCE HALL**



# KIU HOUSING



# Student and Guest Housing Studios

24 m<sup>2</sup>



# STUDENTS DORMITORIES

TYPICAL ROOM SPACE PER STUDENT

## 24 SQ METERS



# CAMPUS

- 158 HECTARES OF LAND
- LOCATED IN A FOREST CULTIVATED WITH ENDEMIC TREE VARIETIES
- 170,000 SQ.M. DEVELOPMENT (KIU BUILDINGS)





 **KIU International Advisory Board Members**



**PROF. DR. SEBASTIAN SCHMIDT  
(CHAIR OF THE BOARD)**

SCIENTIFIC DIRECTOR,  
HELMHOLTZ-ZENTRUM  
DRESDEN-ROSSENDORF (HZDR),  
GERMANY



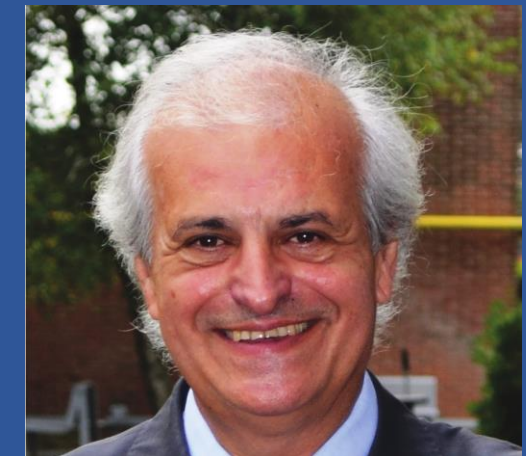
**PROF. RAYMOND MIRALBELL**

MEDICAL DIRECTOR OF  
THE PROTON THERAPY CENTER,  
UNIVERSITY HOSPITAL QUIRON SALUD  
MADRID, SPAIN



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JÜLICH GMBH, GERMANY



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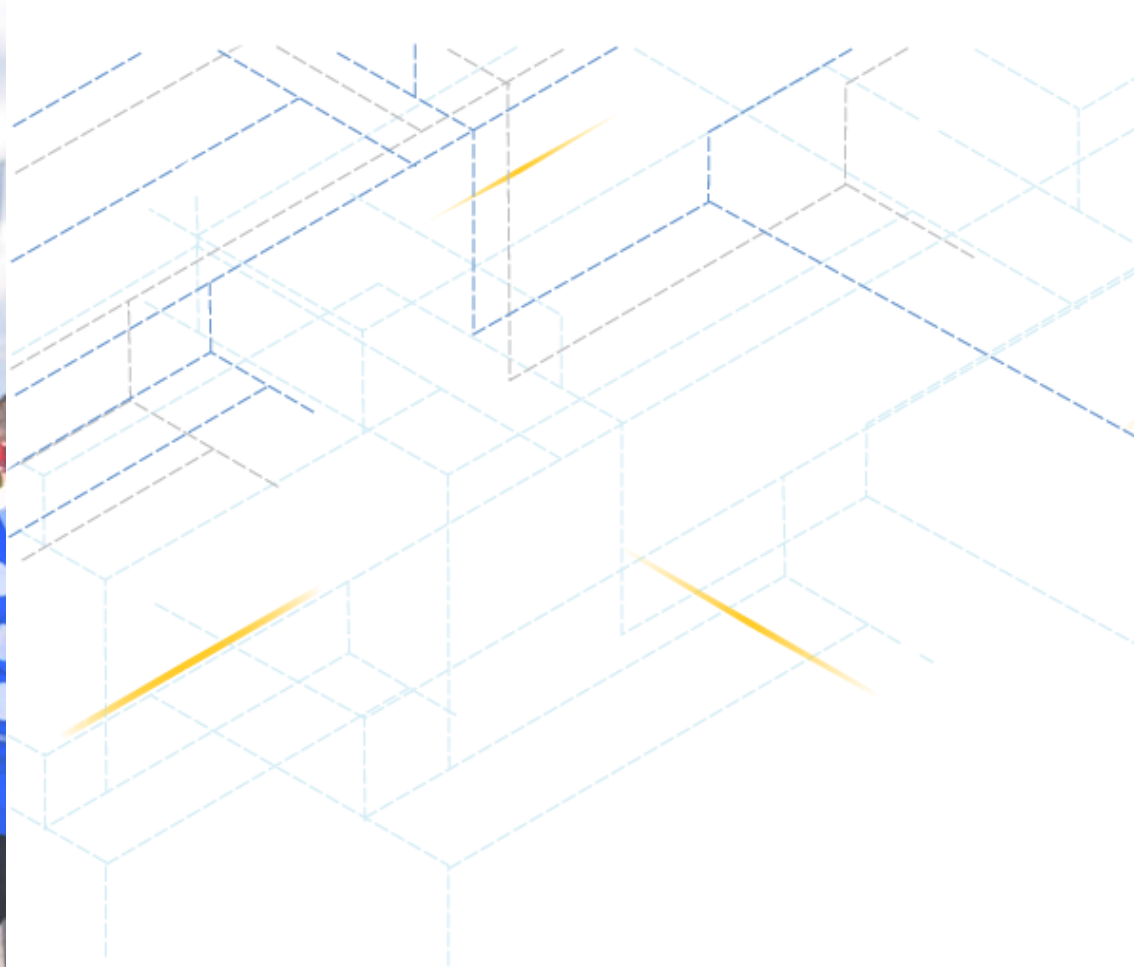
**PROF. DR. HANS STROEHER**

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FORSCHUNGSZENTRUM JÜLICH GMBH,  
GERMANY



**PROF. ZENSHO YOSHIDA**

PROFESSOR OF THE UNIVERSITY OF  
TOKYO, GRADUATE SCHOOL OF  
FRONTIERS IN SCIENCE, JAPAN



## Academic programs for 2020-2021 Academic Year

- Computer Science BSc
- Mathematics BSc
- Management BSc



**KUTAISI  
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# BSc Program in **Computer Science**



## Program Concentrations:

- ✓ System Architecture
- ✓ Software Engineering
- ✓ Computer Networks
- ✓ Databases
- ✓ Artificial Intelligence

**Admission numbers 2020:** **146**



**Admission numbers 2021:** **204**



## **Tuition Fees:**

Georgian Nationals: 720 \$/Year

International Students: 5500 \$/Year

## International Partnerships:

- Technical University Munich (TUM)
- NTT Security, Japan Telecom (Computer Security)

# BSc Program in **Mathematics**

*Solid knowledge in the foundation fields of mathematics;*

## "Mathematics Ecosystem"

- **Visual Math Fest** – KIU students' competition
- **Pi-day Contest** – Problems are developed and corrected by KIU students for high school
- **Math Club** – Training for international students' Olympiad/contests
- **Competitive Programming Club** – Training for international programming competition
- **TextSubject Glossary for Technical Terms** – Partnership with British Council
- **KIU Convention** – Scientific Cooperation and Internationalization Platform

**Admission Numbers 2020: 18**



**Admission Numbers 2021: 20**



## **Tuition Fees:**

Georgian Nationals: 720 \$/Year

International Students: 5500 \$/Year



# BSc Program in **Management**



## **Program concentrations:**

- ✓ Innovation and Entrepreneurship
- ✓ Marketing, Strategy and Leadership
- ✓ Operations and Supply Chain MGMT
- ✓ Finance and Accounting
- ✓ Economics and Politics

## **International Partnerships:**

- TUM
- World Trade Organization - WTO Chair Georgia
- Tokio Marine, Tohoku Uni. - Insurance, Disaster Risk Management

***Admission numbers 2020:*** **146** 

***Admission numbers 2021:*** **225** 

## **Tuition Fees:**

Georgian Nationals: 720 \$/Year

International Students: 5500 \$/Year

# KIU – MSc Program



## MASTER IN FINANCE AND INFORMATION MANAGEMENT

### RANKED #1 IN EUROPE

In nationwide CHE Master-Ranking of 2008, 2011, 2014, 2017, and 2020 of the newspapers "Die Zeit" and "Handelsblatt" ranked 1st in all categories.

IMPLEMENTED IN GEORGIA

**Admission numbers 2024: 20** 

**Tuition Fee:**  
**12,250 GEL (GEO)**  
**7,000 EUR (INT)**

**Degree:** MSc in Finance

**Admission:** Multidisciplinary (BSc in Finance/Management, Computer Science, Math)

# Doctoral Programs



## International Doctoral Program in

- ✓ Mathematics
- ✓ Computer Science
- ✓ Economics
- ✓ Nuclear Physics

- Unified KIU Doctoral Standard;
- Scientific Excellence as a guiding principle;
- Partnership with **Multiple International Partners;**

First Admission: Autumn 2021

### **Joint Supervision Model:**

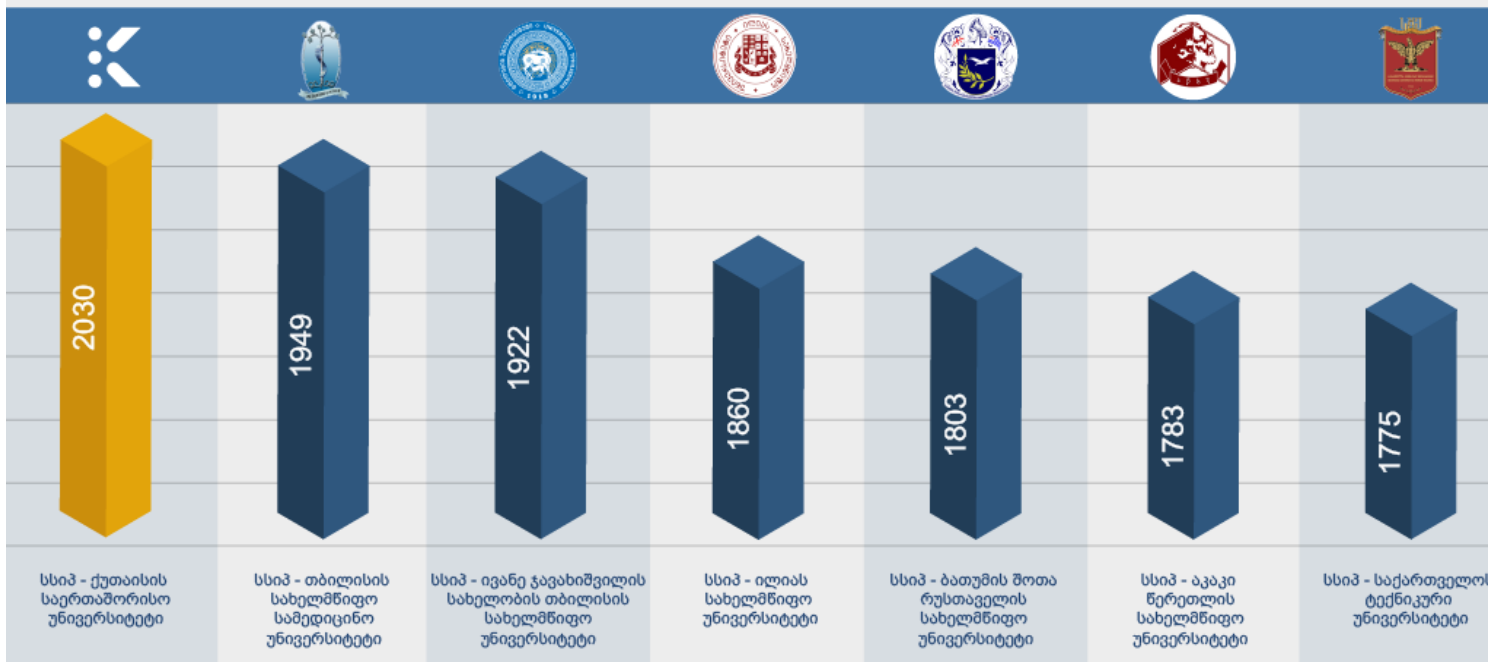
1. *KIU Affiliated Professor*
2. *International Professor*

### **Degree Awarded:**

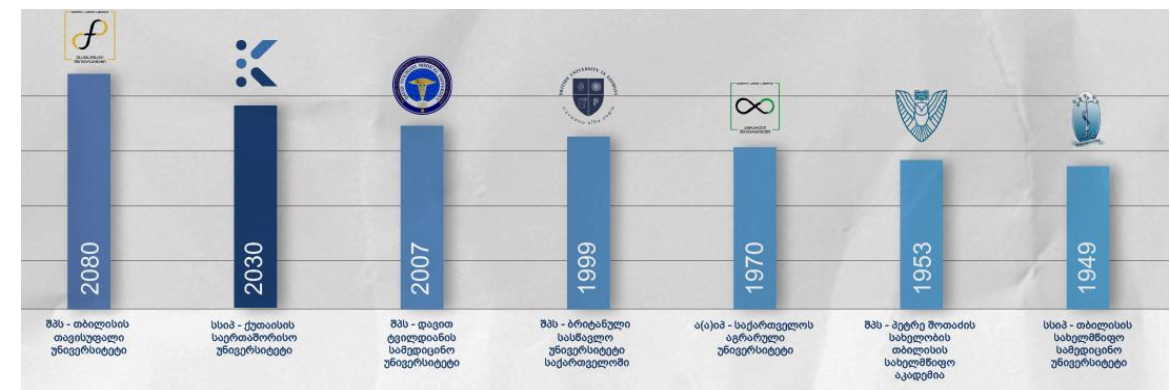
- PhD Degree
- Double Degree (cotutelle agreement)

# KIU – Admissions

## Top Students at National Level among Public Universities in Georgia in 2020 and 2021 (National Exams)



|                                       | MATH       | CS  | MGMT | TOTAL |
|---------------------------------------|------------|-----|------|-------|
| <b>FEMALE STUDENTS</b>                | <b>45%</b> | 19% | 38%  | 29%   |
| <b>SUCCESS RATE AT NATIONAL EXAMS</b> | 8%         | 24% | 27%  | 23%   |

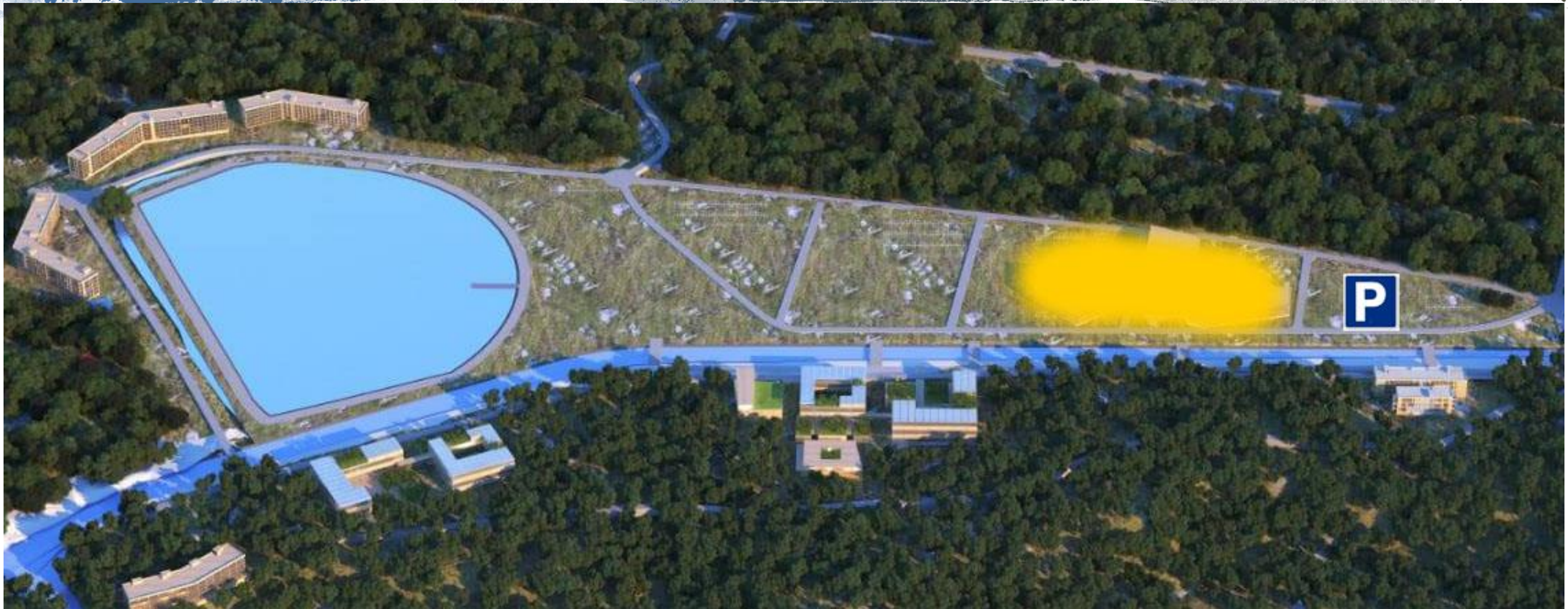




# KIU RESEARCH Hadron Therapy Center

# KIU HTC - SITE

-  Ծառանոց
-  Նավթաշոռոն
-  Մեծահասակ



# KIU HTC – BUILDING CONCEPTS

## Two Separate Bunkers



### KUTAISI PROTON THERAPY CLINIC

**BUNKER 1** – Radiation Shielding Bunker for IBA ProteusONE Cyclotron (500-600 m<sup>2</sup>);

**BUILDING 1** – Connected to the Bunker 1 - Proton Therapy Clinic for proton therapy treatment and all necessary equipment (1,500-2,000 m<sup>2</sup>);

### KUTAISI CYCLOTRON LAB

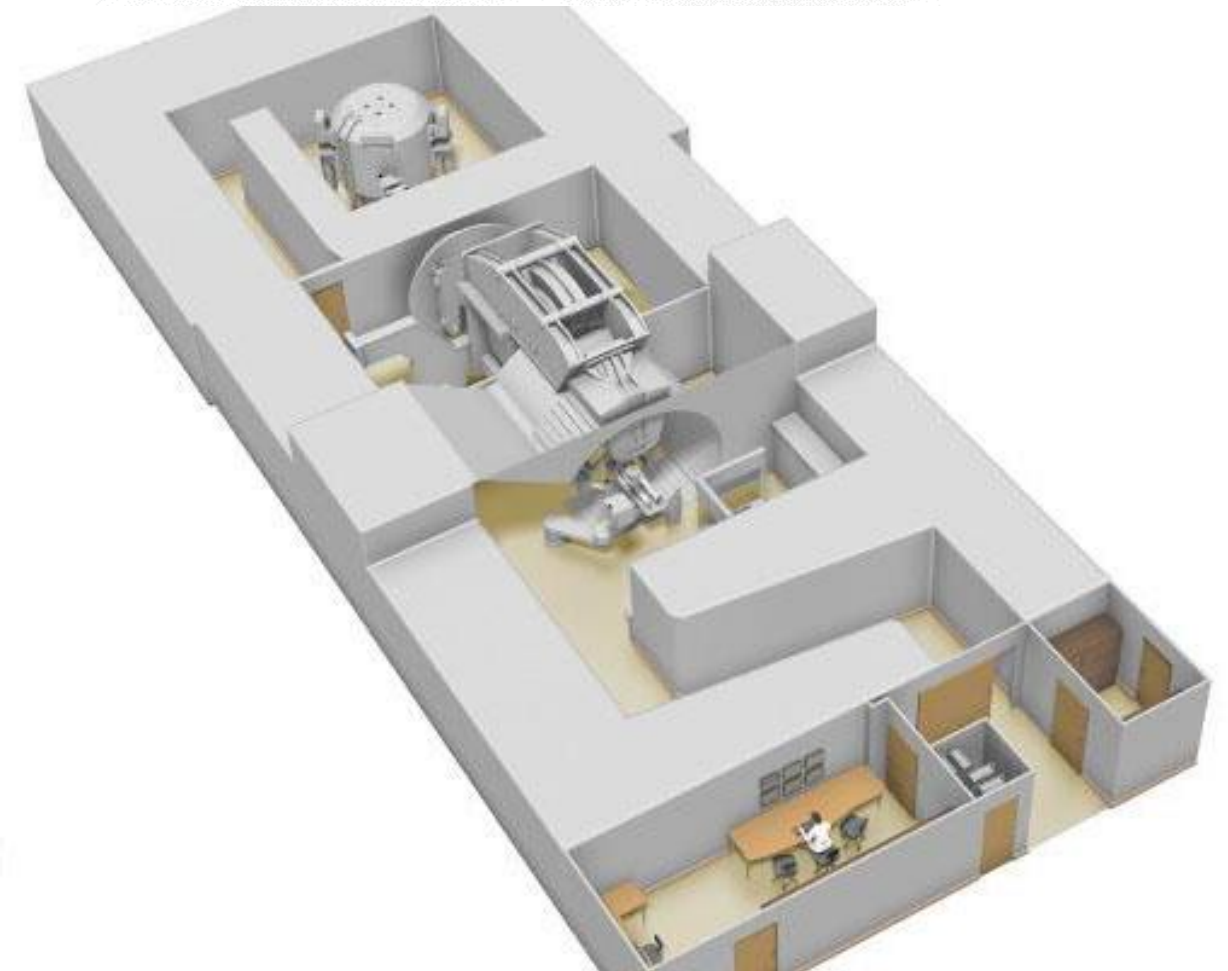
**BUNKER 2** – Radiation Shielding Bunker for IBA S2C2 Cyclotron research facility (500-600 m<sup>2</sup>);

**BUILDING 2** – Connected to the Bunker 2 - Building for research facility (1,500-2,000 m<sup>2</sup>);

# KIU HTC - FACILITIES

- **KIU Proton Therapy Clinic**  
*IBA Proteus<sup>®</sup> ONE*
- **Kutaisi IBA Cyclotron Lab**  
*IBA S2C2 Cyclotron*

*Ion Beam Applications S.A. (Belgium)  
proton accelerators for 240 MeV for research  
and treatment*





# July 11 – Groundbreaking Event

ევთაისის  
საერთაშორისო  
უნივერსიტი



# Particle Therapy Co-Operative Group (PTCOG)



|         |  |   |                       |          |   |       |
|---------|--|---|-----------------------|----------|---|-------|
| Egypt   | Children's Cancer Hospital Foundation, Cairo | p | 230, cyclotron, (IBA) | 1 gantry | 1 | 2022? |
| Georgia | Kutaisi International University, Kutaisi    | p | 230, cyclotron, (IBA) | 1 gantry | 1 | 2024  |

# KIU HTC - PROJECT



ევთანის  
სართავო-სამშენობლო  
უნივერსიტეტი



# KIU HTC - PROJECT

● ● ●  
● ● ●  
● ● ●

ԾԾՏԱՈՆՈՆ  
ՆՆԱՐԿՏԱՅՈՐԿՈՆԿՈՒ  
ՄՆՈՅՎԱՐՆՈՒԹՅՈՒՆ

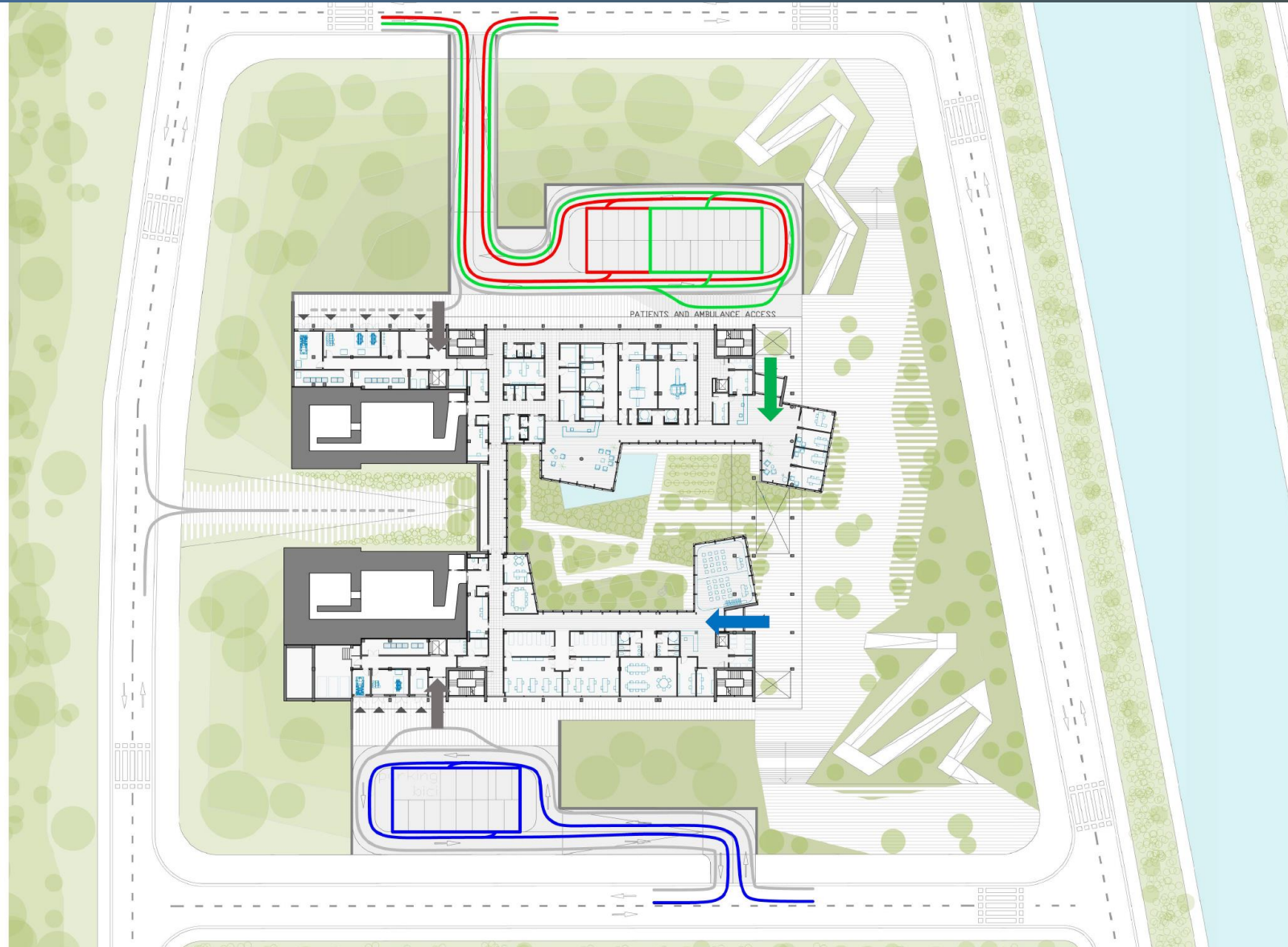
## ACCESS CIRCULATIONS

### ACCESSES

- ➔ PATIENTS AND VISITORS
- ➔ RESEARCH
- ➔ SERVICES

### VEHICLES

- PATIENTS AND VISITORS
- RESEARCH
- MEDICAL STAFF
- SERVICES
- ▲ TECHNICAL



# KIU HTC - PROJECT



ქვეყნიური  
საარქიტექტონო  
უნივერსიტეტი



IDOM

# KIU Hadron Therapy



# KIU International Partners

●  ԺԽՏԱՌՆՈՆ  
●  ՆԱԵՐՏԱԾՄՐԻՆՄ  
●  ՄՆՈՅՎԻՆՈՒԹՅՈՒ

**TUM** int

TUM International GmbH  
The University Company

 **BRITISH  
COUNCIL**





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