2019 ABEC Design School Program

Time	Day 1	Day 2	Day 3	Day 4	Day 5
8:00– 8.30	Registration	Arrival	Arrival	Arrival	Hands on
8.30 – 9.00	Opening ceremony	Keynote (5)	Keynote (7)	Keynote (8)	
9:00 – 9:45	Keynote (1)	Class (II)	Class (III)	Class (V)	
9:45– 10:30	Keynote (2)				
10:30 – 11:00	Poster session	**Coffee Break**			
11:00 – 11:30	Keynote (3)	Hands on	Class (IV)	Hands on	Projects presentation and judging
11:30– 12:00	Keynote (4)				
12:00 – 13:00	Students pitch and group assignment		Workshop (IV)		
13:00 – 14:00	**Lunch Break**				
14:00 – 15:00	Hospital Visits	Keynote (6)	Workshop (V/VI)	Hands on	Closing remarks
15:00 – 16:30		Workshop (I/II)			
16:30 – 17:00		**Coffee Break**			
17:00 – 19:00	Class (I)	Workshop (III)	Hands on	Hands on	***Closing gala dinner and awards ceremony***
19:00 – 20:30	**Dinner**				
20:30 – 10:00	Hands on	Hands on	Dinner Theatre at Ndere Cultural Center (optional)	Hands on	

CLASSES

Classes present the various steps for design of medical devices compliant to relevant standards to ensure patient safety and performance

Class	Topic	Responsible
I	CDIO methodologies for medical devices	Prof. Andrés Díaz Lantada Universidad Politecnica de Madrid
II	Needs finding and project scoping	Mr. Million Mafuta Malawi Polytechnic
III	Systematic development methodologies for medical devices	Prof. Andrés Díaz Lantada Universidad Politecnica de Madrid
IV	Regulation on medical devices and use of UBORA platform to minimize human error	Ms. Licia Di Pietro University of Pisa
V	Entrepreneurship and Innovation	Dr. Douglas Sanyahumbi Rice 360°

WORKSHOPS

Hands on practical sessions on specific topics that can be implemented by students in their open medical device design projects

Workshop	Topic	Responsible
I	Creativity promotion in Medical Device projects	Prof. Andres Diaz Lantada and Prof. Juan Manuel Muñoz Guijosa Universidad Politecnica de Madrid
II	Promotion of project management and teamwork skills	Prof. Rocío Rodríguez Rivero Universidad Politecnica de Madrid
III	3D Printing in healthcare	Dr. Carmelo De Maria University of Pisa
IV	Personalized design of medical devices with low cost scanners	Mr. Adrian Martinez Cendrero and Mr. Rodrigo Zapata Martinez Universidad Politecnica de Madrid
V	Computer-aided design of medical devices	Prof. Juan Manuel Munoz Guijosa and Prof. Andrés Díaz Lantada Universidad Politecnica de Madrid
VI	Design for impact: How to Increase the Likelihood Your Design Effort will Succeed	Prof. Youseph Yazdi Johns Hopkins University, USA

KEYNOTE SPEAKERS

Highlighting the role of biomedical engineering in the context of Cross-Cutting Issues in Surgery, Obstetrics and Anesthesia and identifying future research directions

Keynote	Topic	Speaker	Home Institution
1	Opening Ceremony – UIRI as a center of Excellence in Industrial Research	Prof. Charles Kwesiga	Uganda Industrial Research Institute
2	Artificial Intelligence at the Science Interface - Virtual vs Reality	Dr. Daudi Jjingo	Makerere University, Uganda
3	UNECA – Role in building BME capacity on the African Continent	Dr. Victor Konde	United Nations Economic Commission for Africa
4	Needs-driven innovation in health technologies for Africa: Lessons from the Asia Pacific Experience	Prof. Anurag Mairal	Stanford University, USA
5	With Surgical precision: Some thoughts on contemporary design	Dr. David Goss	The Technion, Israel Institute of Technology
6	Challenges in Surgical Practice: Experience of a Ugandan Surgeon	Dr. Patson Makobore	Najjera Hospital, Kampala, Uganda
7	UBORA: Euro-African Open BME e-platform for Innovation through Education	Prof. Arti Ahluwalia	University of Pisa, Italy
8	Overview of NEST 360° program	Dr. Andrea S. Gobin	Rice 360, Rice University, USA

Map of Key Locations