Innovation and Global Cooperation for Sustainability
12-14 March, 2024

Indo-German Partnership in Higher Education Program (IGP) 2020-2024

DAAD

Applied Research for Sustainable Energy in Buildings[1]
UGC Project Number: No. F -1.9/2020(IC)
15.07.2020 – 31.03.2024

Indo-German Applied Science Collaboration[2]
DAAD Project Number: 57553929
01.07.2020 – 30.09.2024

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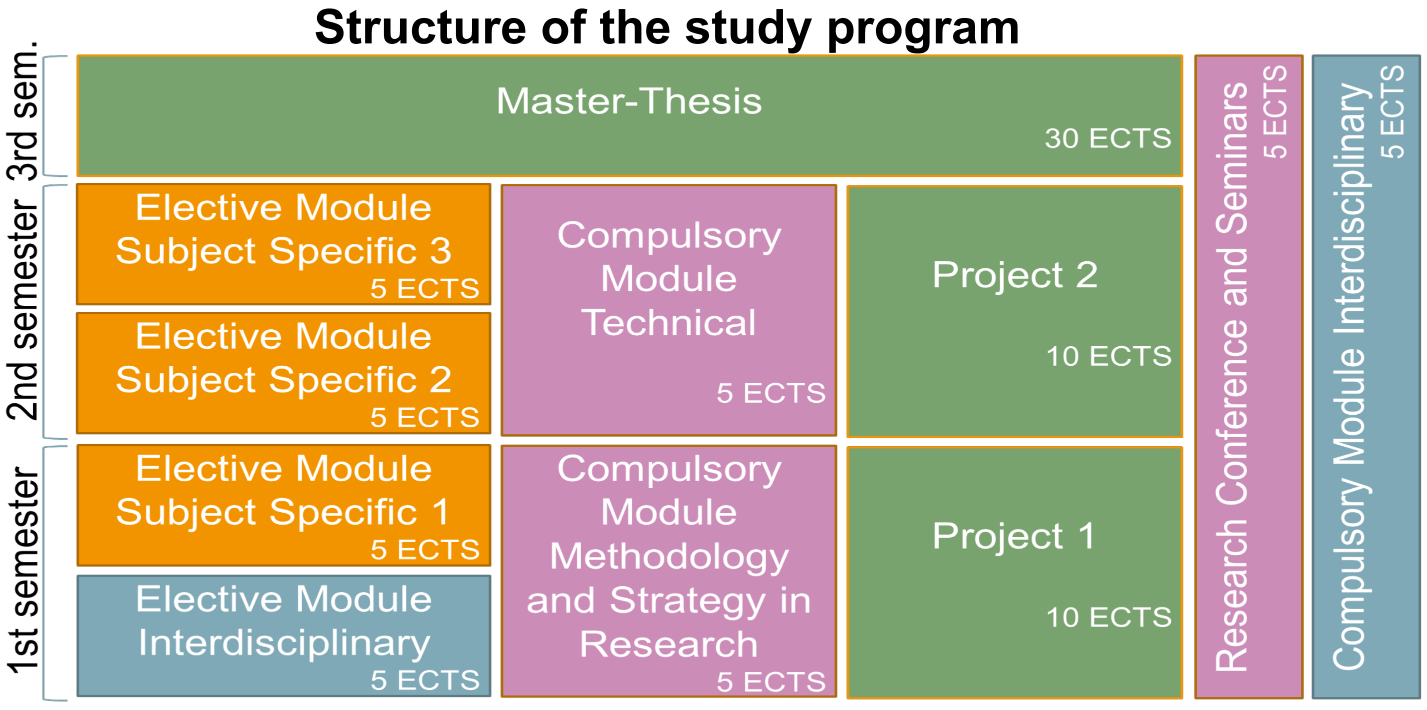
1. Collaborative Study Program

Global Research in Sustainable Engineering

The Master's degree program Global Research in Sustainable Engineering (GSE) offers opportunity to gain higher qualification in applied research and development in an international environment. The program is closely linked to research project and is accompanied by in-depth courses tailored to respective project. For entire duration of the program, students are supervised by faculty from OTH AW and from MNIT Jaipur and must complete at least a semester abroad at partner institute.

Structure of the study program



2. Collaboration Agreement

MNIT Jaipur signed Collaboration Agreement for study program with OTH AW, on 4th Nov, 2022, in presence of Director, MNIT Jaipur Prof. N. P. Padhy and President, OTH AW Prof. Clemens Bulitta. There was also an interactive session of German delegates with MNIT students and faculty members for higher studies in Germany and possible research collaborations.

3. Indo-German Research Colloquium

OTH AW and MNIT Jaipur conducted 3 Indo-German research colloquiums (2 online + 1 offline) covering topics related to CCHP in buildings, battery thermal management, bio-energy, fluid mechanics and machines.

4. Inter-Cultural Exchange

Indo-German Summer Winter School (IGSWS)

At IGSWS, 8 German, 8 Indian students come together to spend 1 week in Germany and 1 week in India. They work together on projects in intercultural groups (4 groups; 2 Indian and 2 German students each).

Main objectives of IGSWS:

1. Learn about Energy Efficient Buildings, Renewable Energies, Sustainability and Climate Protection.
2. Get to know people from another culture and interact with them in a pleasant (learning) atmosphere with fun.

Conduction:

1. 7-11 March 2022, OTH AW & 4-8 April 2022, MNIT
2. 13-17 Feb 2023, MNIT
3. 25-29 Sept 2023, OTH AW & 4-8 March 2024, MNIT

IGSWSs consisted of expert lectures, industrial site visits (Stadtwerke Haßfurt & Biogas plant), group projects, demonstrations, presentations. Project presentations and cultural exchange enriched overall IGSWS.

5. Joint Research Activities

A: Joint ongoing supervision of 2 PhD scholars of MNIT

1. Mr. Rickwinder Singh
Supervisor : Dr. Vivekanand, MNIT Jaipur
Co-Supervisor : Prof. Christoph Lindenberger, OTH AW
2. Mr. Abhilash Bint
Supervisor : Prof. Harlal Singh Mali, MNIT Jaipur
Co-Supervisor : Prof. J Rosenthal, OTH AW

B: Joint supervision of Masters of Technology (Renewable Energy & Mechanical Engg.) (04 completed; 2 ongoing)

Joint Publications (04 till now):

1. Talwar P, Verma N, Khatri H, Ahire PD, Chaudhary G, Lindenberger C, Vivekanand V. A systematic review of photovoltaic-green roof systems in different climatic conditions focusing on sustainable cities and societies. Sustainable Cities and Society. 2023 Jul 20:104813.
2. Talwar P, Upadhyay A, Verma N, Singh R, Lindenberger C, Pareek N, Kovalev AA, Zhuravleva EA, Litti YV, Masakapalli SK, Vivekanand V. Utilization of agricultural residues for energy and resource recovery towards a sustainable environment. Environmental Science and Pollution Research. 2023 Sep 4:1-5.
3. Hahm J, Jung SH, Kandaswamy S, Talwar P, Verma N, Vivekanand V, Lindenberger C. A Two-Stage Cascade for Increased High-Value Product Accumulation in *Chlamydomonas asymmetrica*. Fermentation. 2024 Jan 3;10(1):38.

Highlights: 56 Exchange visits | 04 Joint publications | 03 Research Colloquiums | 03 Summer-Winter Schools | 02 Joint PhD