

## RARSUS Water and Energy Online Summer School Agenda

07 – 18 October 2019

|   |                            |                                  |                        | RARSUS Online Summer School  |              |
|---|----------------------------|----------------------------------|------------------------|--|--------------|
| Time  | Mali Time<br>(GMT)         | Algeria +<br>Niger Time<br>(WAT) | Germany Time<br>(CEST) | Water Track  | Energy Track |
| Introduction to Risk and Vulnerability/Climate Change |                            |                                  |                        |  |              |
| Monday<br>07.10.2019                                  | 08:30 – 09:00              | 09:30 – 10:00                    | 10:30 – 11:00          | Logging in on to the platform  |              |
|   | 09:00 – 11:00              | 10:00 – 12:00                    | 11:00 – 13:00          | <b>Welcome remarks, Introduction, and Orientation</b><br>Meet the Experts (ITT, UNU, ZEF), Group Work and Presentation, Peer Assessments, Assignments, Forum Discussion  |              |
|   | All day Self-paced eCourse |                                  |                        | <b>eCourse: Risk and Vulnerability – Theory and Assessment</b><br>UNU-EHS  |              |
|   | 14:00 – 15:30              | 15:00 – 16:30                    | 16:00 – 17:30          | Webinar: Resources, Services & Risks- Lessons from United Nations University (UNU-FLORES)<br>Nexus Observatory Project<br><b>Dr. Mathew Kurian, UNU-FLORES</b><br><b>Recommended reading :</b> <a href="https://nexusobservatory.flores.unu.edu/">https://nexusobservatory.flores.unu.edu/</a> |              |
|   | 15:30 - 16:00              | 16:30 - 17:00                    | 17:30 - 18:00          | - View the eCourse<br>- Introduction to the 'Reflective Review' peer assessment<br>- Introduction to the group presentation assessment activity  |              |
|   |                            |                                  |                        |  |              |
| Tuesday<br>08.10.2019                                 | 09:00 – 10:30              | 10:00 – 11:30                    | 11:00 – 12:30          | Welcome remarks and Introduction<br>Q&A session – Meet the Lecturer <b>Paul Nduhuura, UNU-EHS</b>  |              |
|   | All day Self-paced eCourse |                                  |                        | <b>eCourse: Risk and Vulnerability – Theory and Assessment</b><br>UNU-EHS  |              |



| <b>Time</b>                             | <b>Mali Time<br/>(GMT)</b>        | <b>Algeria +<br/>Niger Time<br/>(WAT)</b> | <b>Germany<br/>Time<br/>(CEST)</b> | <b>Water Track</b>   | <b>Energy Track</b>   |
|---|-----------------------------------|---|------------------------------------|--|---|
| <b>Water and Energy Special Courses</b> |                                   |   |                                    |  |   |
| <b>Wednesday<br/>09.10.2019</b>         | 09:00 – 09:30                     | 10:00 – 10:30                             | 11:00 – 11:30                      | <b>Welcome remarks, Group Work Information</b>   |   |
|   | <i>All day Self-paced eCourse</i> |   |                                    | <b>eCourse: Hydrology Based Approaches for Developing and Operating Infrastructure for Water Management in Urban Settings</b><br>ZEF-Uni Bonn  | <b>eCourse: Resilience &amp; Climate Change in African Cities</b><br>UNU-EHS  |
|   | 10:30 – 12:00                     | 11:30 – 13:00                             | 12:30 – 14:00                      | Webinar: Flood management - Options & Concepts, Probability Analyses, Hydrological Modeling, Design & Dimensioning, Operational Rules, Impact Assessment, Integration in Overall Water Management<br><b>Bernhard Tischbein, ZEF-Uni Bonn</b> | Webinar: UN-Habitat Building Urban Resilience: Tools and Case Study<br><b>Amaya Celaya and Craig Laird</b><br>UN Habitat                                |
|   |                                   |   |                                    | - View the eCourse<br>- Reflective review preparation<br>- Group work  | - View the eCourse<br>- Reflective review preparation<br>- Group work   |
| <b>Thursday<br/>10.10.2019</b>          | 09:00 – 10:30                     | 10:00 – 11:30                             | 11:00 – 12:30                      | Welcome remarks and Introduction Q&A session – Meet the Lecturer<br><b>Dr. Navneet Kumar and Dr. Bernhard Tischbein, ZEF-Uni Bonn</b>  | Welcome remarks and Introduction Q&A session – Meet the Lecturer<br><b>Paul Nduhuura, UNU-EHS</b>   |
|   | 10:30 – 12:00                     | 11:30 – 13:00                             | 12:30 – 14:00                      | Webinar: Geo-Thermal System<br><b>Lúdvík S. Georgsson, UNU-GTP</b>   |   |
|   | <i>All day Self-paced eCourse</i> |   |                                    | <b>eCourse: Hydrology Based Approaches for Developing and Operating Infrastructure for Water Management in Urban Settings</b><br>ZEF-Uni Bonn  | <b>eCourse: Resilience &amp; Climate Change in African Cities</b><br>UNU-EHS  |
|   |                                   |   |                                    | -View the eCourse<br>- Reflective review preparation<br>- Group work   | -View the eCourse<br>- Reflective review preparation<br>- Group work  |
|   | 14:00 – 15:30                     | 15:00 – 16:30                             | 16:00 – 17:30                      | Webinar: Sustainable water management in urban settings, with a focus in Africa<br><b>Dr. Lina Taing</b><br>UNU-INWEH  | Webinar: How can Climate Services support renewable energy generation & management in West Africa?<br><b>Dr. Seyni Salack, WASCAL Competence Center</b> |



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|----------------------------------|----------------------------|-------------------------------------|--|--|--|
| Water, Energy and Food Nexus     |                            |                                     |  |  |  |
| Friday<br>11.10.2019             | 09:00 – 09:30              | 10:00 – 10:30                       | 11:00 – 11:30  | Welcome remarks and Introduction   |  |
|                                  | All day Self-paced eCourse |                                     |  | eCourse: Urban Nexus – Water, Energy and Food Interactions in Urban Context<br>ITT, TH Köln  |  |
|                                  |                            |                                     |  | - View the eCourse<br>- Reflective review preparation<br>- Group work  |  |
|                                  |                            |                                     |  |  |  |
| Monday<br>14.10.2018             | 09:00 – 10:00              | 10:00 – 11:00                       | 11:00 – 12:00  | Welcome remarks and Introduction<br>Q&A session – Meet the Lecturer<br>Prof. Ramchandra Bhandari, ITT, TH Köln   |  |
|                                  | 10:00 – 11:30              | 11:00 – 12:30                       | 12:00 – 13:30  | Webinar: Water-Energy-Food Nexus in the context of Risk Assessment and Reduction<br>Ashwin Seetal, Council for Scientific and Industrial Research (CSIR) |  |
|                                  | All day Self-paced eCourse |                                     |  | eCourse: Urban Nexus – Water, Energy and Food Interactions in Urban Context<br>ITT, TH Köln  |  |
|                                  |                            |                                     |  | -View the eCourse<br>- Reflective review preparation<br>- Group work   |  |
|                                  | 14:00 – 15:30              | 15:00 – 16:30                       | 16:00 – 17:30  | Webinar Nexus: Building WEF Nexus partnerships and projects in Africa <sup>1</sup><br>Prof. Dr. Michael Jacobson, Pennsylvania State University          |  |
| Water and Energy Special Courses |                            |                                     |  |  |  |
| Tuesday<br>15.10.2019            | 09:00 – 09:30              | 10:00 – 10:30                       | 11:00 – 11:30  | Reflective Review Q&A  |  |
|                                  | All day Self-paced eCourse |                                     |  | eCourse: Spatial Planning in the Context of Urban Water Management   | eCourse: Climate Resilient Energy Supply Infrastructure              |
|                                  |                            |                                     |  | -View the eCourse<br>- Reflective review preparation<br>- Group work   | -View the eCourse<br>- Reflective review preparation<br>- Group work |
| 13:00 – 14:30                    | 14:00 – 15:30              | 15:00 – 16:30                       | Webinar: Wastewater Management in Urban Area<br>Dr. Abdoul Azize Seyni<br>Ministry of Environment,<br>Niger Republic | Webinar: Energy infrastructures: Gateways to the future of Energy<br>Dr. Moumouni Yacouba<br>University of Nevada,Las Vegas                              |  |



|  | 15:00                      | 16:00                            | 17:00                  | Deadline for submission of ‘Reflective Review’   |  |
|--|----------------------------|----------------------------------|------------------------|--|--|
| Time   | Mali Time<br>(GMT)         | Algeria +<br>Niger Time<br>(WAT) | Germany Time<br>(CEST) | Water Track  | Energy Track   |
|  |                            |                                  |                        |  |  |
| Wednesday<br>16.10.2019  | 09:00 – 10:30              | 10:00 – 11:30                    | 11:00 – 12:30          | Welcome remarks and Introduction<br>Q&A session – Meet the Lecturer<br><b>Dr. Navneet Kumar and Dr. Bernhard Tischbein, ZEF-Uni Bonn</b>   | Welcome remarks and Introduction<br>Q&A session – Meet the Lecturer<br><b>Prof. Ramchandra Bhandari, ITT, TH Köln</b>  |
|  | 10:30 – 12:00              | 11:30 – 13:00                    | 12:30 – 14:00          | Webinar: Resilience and Sustainability of Urban Food Systems<br><b>Dr. Darya Hirsch International Centre for Sustainable Research (IZNE) at the Bonn-Rhein-Sieg University of Applied Sciences (BRSU), Germany</b> | Webinar: Affordable, reliable, sustainable and modern energy for all – Benefits of building resilience in a renewable energy project design to develop a bankable project proposal and unlock climate finance with the IRENA Project Navigator<br><b>Simon Benmarraze IRENA Innovation and Technology Centre</b> |
|  | All day Self-paced eCourse |                                  |                        | <b>eCourse:</b> Spatial Planning in the Context of Urban Water Management  | <b>eCourse:</b> Climate Resilient Energy Supply Infrastructure   |
|  |                            |                                  |                        | -View the eCourse<br>- Reflective review preparation<br>- Group work   | -View the eCourse<br>- Reflective review preparation<br>- Group work   |
|  | 13:00 – 14:30              | 14:00 – 15:30                    | 15:00 – 16:30          | Webinar: Earth Observation and GIS Technology for Spatial Management of Water Resources<br><b>Navneet Kumar, ZEF-Uni Bonn</b>  |  |
|  | 15:00                      | 16:00                            | 17:00                  | Deadline for completion of ‘Reflective Review’ peer assessment   |  |
| Feedback, discussion on assessment, assignment, Group Presentation and Closing |                            |                                  |                        |  |  |
| Thursday<br>17.10.2019   | 10:30 – 12:00              | 11:30 – 13:00                    | 12:30 – 14:00          | Q&A, Feedback and Discussion of Reflective Review by Experts<br><b>(Bernhard Tischbein and Navneet Kumar, ZEF-Uni Bonn   Paul Nduhuura and Emmanuel Cheo, UNU-EHS   Khalid Mehmood, ITT)</b>                       |  |
|  |                            |                                  |                        | Break  | Break  |
|  | 13:00 - 14:30              | 14:00 - 15:30                    | 15:00 - 16:30          | Finalization of Group Presentation   | Finalization of Group Presentation   |
|  |                            |                                  |                        | Break  | Break  |
|  | 15:00 - 16:30              | 16:00 - 17:30                    | 17:00 - 18:30          | Finalization of Group Presentation   | Finalization of Group Presentation   |



| <b>Time</b>                  | <b>Mali Time<br/>(GMT)</b> | <b>Algeria +<br/>Niger Time<br/>(WAT)</b> | <b>Germany<br/>Time<br/>(CEST)</b> | <b>Water Track</b>   | <b>Energy Track</b> |
|------------------------------|----------------------------|---|------------------------------------|--|---------------------|
|                              |                            |   |                                    |  |                     |
| <b>Friday<br/>18.10.2019</b> | 09:00 – 09:30              | 10:00 – 10:30                             | 11:00 – 11:30                      | Welcome remarks and Orientation (Group Presentation)                                 |                     |
|                              |                            |   |                                    | Break  |                     |
|                              | 10:30 – 11:30              | 11:30 – 12:30                             | 12:30 – 13:30                      | Water Group Presentations (Groups 1 & 2)<br>Energy Group Presentation (Groups 5 & 6) |                     |
|                              |                            |   |                                    | Break  |                     |
|                              | 12:00 - 13:00              | 13:00 - 14:00                             | 14:00 - 15:00                      | Water Group Presentation (Groups 3 & 4)<br>Energy Group Presentation (Groups 7 & 8)  |                     |
|                              | 13:00 - 13:15              | 14:00 - 14:15                             | 15:00 - 15:15                      | Wrap-up and Closing  |                     |

Certificates will be issued upon assessment and requirements completion.