**Annex I: Course Outline**

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| Date | Course arrangement |
| July 30 | Research progresses and trends of water cycle modellingGlobal water resources issuesTheories of water resources managementMethods on integrated water resources management  |
| July 31 | Overview of water resources modelling methodsWater quality modelling Surface water modelling based on the Hydromad modelCase studies |
| August 1 | Policies and regulations on water resources managementSocio-economic attributes of water resources managementIntegrated assessment and modelling of socio-environmental Systems Integrated evaluation and management of water resources based on the Bayesian frameworkCase study for the Campaspe River  |
| August 2 | Python language basicsInteractive Modelling, and High-Performance PythonSoftware version controlOptimization methods and algorithmsOperation of water resources management models |
| August 3 | Advanced data statistical analysis Model calibration and optimization methodsSensitivity analysis Case studies |