Course Name – GenAI: Use Cases and Societal Implications
Course Code – TBD
Credits – 4

Faculty Name – Dr. Pradeep Guin

Faculty Biography – Dr. Guin holds a PhD in Public Policy from the University of Maryland, Baltimore County, and has bachelor's and master's level degrees in Statistics from the University of Delhi. His primary area of research lies at the intersection of environment, health, governance, policy, and "new-age" technologies such as GenAI. He focuses on studying the impact of climate change on human health and health systems, and on the politics and governance of environmental issues. He also explores how GenAI is changing the face of various societal domains, including but not limited to environment and climate change.

Course Description – We are living through a pivotal moment in human history. Generative AI or GenAI as it is popularly known, is no longer a futuristic concept; it is a current reality reshaping our cognitive habits and the global economy. This elective is designed as a deep dive into the dual nature of GenAI. We aren't just exploring at how to use these tools; but are using cases to understand the positive and negative impacts of GenAI on humans and other life forms. The course **will not** treat GenAI as a standalone subject. Rather, we will look at it through a multidisciplinary lens. For example: How does it augment our legal practices? How does it alter the earnings of freelance data analysts? Does it augment our cognitive capacity, or does it lead to a form of 'cognitive atrophy'? We tackle these questions using rigorous research methodologies, ensuring that you are not just users of AI, but critics and strategists of it. The mostly seminar-style classes will focus on discourse and critical analysis. Our objective is twofold: first, to achieve technical fluency, meaning – understanding how these models function under the hood – and second, to develop a critical foresight. We will move beyond the basics of 'how-to' and look at the macro-level transformations that GenAI is driving using diverse sectors, such as health, education, security and defense, climate and sustainability, and travel and tourism, to begin with. By the end of this semester, you would have the ability to integrate GenAI into professional workflows while navigating its complex ethical landscape. Specifically, you would be able to: (a) critically evaluate GenAI's impact on your chosen field, (b) design GenAI-integrated solutions for complex problems, and (c) lead the conversation on responsible GenAI governance.

Prerequisites – The course is relevant to students from across the schools at JGU who are either in a master's programme or in advanced stage (3rd year onwards) of their undergraduate programme.

Scheme of Evaluation and Grading – Course assessment is most likely going to be continuous in nature, with grades credited to you in a progressive manner as we advance in the semester. It will include individual-level participation in class proceedings, and/or group-based presentations and research papers as a final submission. In addition, master-level student will be required to complete a conference-style poster, and do additional readings.