Government Polytechnic Mahasamund (C.G.)
Department of Mechanical Engineering
Under the aegis of ATAL Academy
Schedule of BASIC FDP

FDP Application Number: 1716015836
Title of the FDP: "Advancements in Robotics (AiR-2024)"
FDP Start Date: 14-Oct-2024   **FDP End Date:** 19-Oct-2024

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
9:00 – 9:30 Inauguration					
9:30 – 12:00 Session 1 1. Name of the Expert : *Dr. Rajesh Doriya* 2. Designation : *Assistant Professor* 3. Organization: *NIT, Raipur (C.G.)* 4. Experience in Years: *13 years* 5. Topic to be taught: *Introduction to AI & Robotics.*	**9:30 – 12:00 Session 3** 1. Name of the Expert : *Dr. Jagpal Singh Bal* 2. Designation : Dy. Director 3. Organization : *CGDTE, Raipur (C.G.)* 4. Experience in Years: *15 years* 5. Topic to be taught: Advancements & Applications of AI in Robotics.	**9:30 – 12:00 Session 5** 1. Name of the Expert : *Dr. Ganesh P. Shukla* 2. Designation : *Sr. Assistant Professor* 3. Organization: *GGU, Bilaspur (C.G.)* 4. Experience in Years: *16 years* 5. Topic to be taught: Industry 4.0 & Robotics Applications towards sustainable development.	**9:30 – 12:00 Session 7** 1. Name of the Expert : *Dr. Pawan Kumar Patnaik* 2. Designation : *Associate Professor* 3. Organization: BIT, Durg (C.G.) 4. Experience in Years: *19 years* 5. Topic to be taught: *Role of robotics in agriculture.*	**9:00 – 1:00 Industrial visit** 1. Name of the Organization: *Ministry of micro, small and medium Enterprises (MSME)* 2. Complete address with pincode : *Plot No. 2D, Sector-B, Borai Industrial Growth Center Rasmada Durg(C.G.)-491001* 3. Industry Type: *MSME* 4. Area of specification : *AI, Robotics, Machine Learning, Data Science, Mechatronics.*	**9:30 – 12:00 Session 10** 1. Name of the Expert : *Er. Chandrika Vishwakarma* 2. Designation : *Principal* 3. Organization: *Govt. Polytechnic Mahasamund.* 4. Experience in Years: *19 years* 5. Topic to be taught: *The Emerging role of Artificial Intelligence in Society.*
12:00 – 1:00 Article Discussion 1. Title of the Research Paper : *Path planning for robots: an elucidating draft* 2. Name of the journal: *International Journal of Intelligent Robotics and Applications* 3. Year of Publication: *2020*	**12:00 – 1:00 Article Discussion** 1. Title of the Research Paper : *The Future of Robotics: Advancements and Implications* 2. Name of the journal: *The Computer Journal* 3. Year of Publication: *2024*	**12:00 – 1:00 Article Discussion** 1. Title of the Research Paper : *Advances in Artificial Intelligence for Robotics.* 2. Name of the journal: *Journal of Robotics Systems* 3. Year of Publication: *2024*	**12:00 – 1:00 Article Discussion** 1. Title of the Research Paper : *Cloud Robotics: Architecture, Challenges and Applications* 2. Name of the journal: *IEEE Network.* 3. Year of Publication: *2012*		**12:00 – 1:00 Article Summary**
1:00 – 2:00 Lunch	**1:00 – 2:00 Lunch**	**1:00 – 2:00 Lunch**	**1:00 – 2:00 Lunch**	**1:00 – 2:00 Lunch**	**1:00 – 2:00 Lunch**
2:00 – 4:30 Session 2 1. Name of the Expert : *Dr. Rajesh Doriya* 2. Designation : *Assistant Professor* 3. Organization: *NIT, Raipur (C.G.)* 4. Experience in Years: *13 years* 5. Topic to be taught: *Advances in Robotics.*	**2:00 – 4:30 Session 4** 1. Name of the Expert : *Dr. Jagpal Singh Bal* 2. Designation : Assistant Director 3. Organization: *CGDTE, Raipur (C.G.)* 4. Experience in Years: *15 years* 5. Topic to be taught: *Enhancing autonomous system & Human-Robot interaction.*	**2:00 – 4:30 Session 6** 1. Name of the Expert : *Dr. Ganesh P. Shukla* 2. Designation : *Sr. Assistant Professor* 3. Organiz 4. 5. ation: *GGU, Bilaspur (C.G.)* 6. Experience in Years: *16 years* 1. Topic to be taught: *Role of robotics application toward green manufacturing.*	**2:00 – 4:30 Session 8** 1. Name of the Expert : *Dr. Pawan Kumar Patnaik* 2. Designation : *Associate Professor* 3. Organization: BIT, Durg (C.G.) 4. Experience in Years: *19 years* 5. Topic to be taught: *Pure Hexagonal context free grammars generating Hexagonal Pattern*	**2:00 – 4:30 Session 9** 1. Name of the Expert : *Er. Chandrika Vishwakarma* 2. Designation : *Principal* 3. Organization: *Govt. Polytechnic Mahasamund.* 4. Experience in Years: *19 years* 5. Topic to be taught: *Basics of Robotics*	**2:00 – 4:00 MCQ & Reflection Journal**
4:30 – 5:30 Hands on training /Labs (Robotics Operating System)	**4:30 – 5:30 Hands on training /Labs** (Understanding of robotics components)	**4:30 – 5:30 Hands on training /Labs** (Wire robot using DPDT switch)	**4:30 – 5:30 Hands on training /Labs** (Obstacle avoiding robot using ultasonic sensor)	**4:30 – 5:30 Hands on training /Labs** (floor cleaning robot using bluetooth)	**4:00 – 5:00 Valedictory Session**