

Thrust Areas of AICTE Training And Learning (ATAL) Academy FDPs/CPDPs

Thrust Areas

1. Artificial Intelligence
2. Internet of Things (IoT)
3. Block chain
4. Machine Learning
5. Robotics
6. Quantum Computing
7. Data Sciences
8. Cyber Security
9. 3D Printing and Design
10. Augmented Reality (AR)/ Virtual Reality (VR)
11. Drones

Engineering

1. Systems Engineering
2. Sustainability Engineering
3. Computer Science; Biology
4. Energy Engineering
5. Green Technology
6. Electrical; Computer Engineering
7. Strategic Civil Infrastructure
8. Coastal; Offshore Engineering
9. Smart Cities
10. Waste Management Technology
11. GIS; Remote Sensing
12. Construction Technology
13. Engineering Law
14. Climate Sciences
15. Mining; Mineral Processing
16. Underground Space Utilization
17. Bio Similar Technology
18. Genome Engineering; Technology
19. Precision Health Technology
20. Control Systems; Sensors Technology
21. Infrastructure Engineering
22. Environmental Geo-technology
23. Earthquake Engineering
24. Waterways Transport Engineering
25. Lean Construction Technology
26. Aqua-food technology
27. Organ Printing Technology
28. Nutrition Technology
29. Drug Engineering
30. Cellular Agriculture
31. Sensors Technology
32. Electric Vehicles
33. Energy Storage
34. Magnetic Levitation
35. Photonics
36. Low cost desalination
37. Ontogenetic

38. Wearable Devices
39. Gamification
40. Telemedicine
41. Molecular Manufacturing
42. Alternate Fuels
43. Real Time Translation
44. Biotechnology
45. Biomimetic
46. Novel Materials
47. Lab on Chip
48. Cloud Technology
49. Digital Holography & 3D Imaging
50. Immersive Virtual Reality
51. Human Centre Computing
52. Design Thinking
53. Lab/Incubators/Prototype Lab, 3D Printers
for Prototyping (student ideas) Consulting
54. Mining and Data analytics
55. Fog Computing
56. Digital Forensics
57. Digital Currency

Management

1. Technology Management
2. Business Analytics
3. Six Sigma in Quality Management
4. Engineering Management
5. Innovation Management
6. Supply Chain Resilience
7. Heritage Management
8. Project Management
9. Operations Management
10. Organizational Behavior
11. Strategic Planning
12. Management Information System
13. Social Enterprise Management
14. Talent Management
15. Risk Management

Arts & Craft

1. Sculpture
2. Animation
3. Ceramics
4. Metal Craft
5. Photography
6. Visual Communication
7. Communication Design
8. Illustration
9. Painting
10. Mural

Design & Media

1. Animation Film Design
2. Apparel Design
3. Ceramic; Glass Design
4. Design for Retail Experience
5. Digital Game Design
6. Film and Video Communication
7. Furniture and Interior Design
8. Graphic Design
9. Information Design
10. Interaction Design
11. Lifestyle Accessory Design
12. New Media Design
13. Photography Design
14. Product Design
15. Textile Design
16. Toy; Game Design
17. Transportation; Automobile Design
18. Universal Design
19. Fashion Communication
20. Design thinking

Life Skills Management

1. Productivity Enhancement
2. Capacity Building
3. Leadership Excellence
4. Emotional Intelligence
5. Team-building and Coordination
6. Perception & Decision Making
7. Training for Social Connectedness and Inspiration
8. Personal Effectiveness
9. Stress Management
10. ROAD - Response Effectiveness, Organizing Self, Attitudinal Shift, Decision Making
11. Developing Consciousness (Yoga and Meditation)
12. Problem Solving
13. Execution Planning
14. Execution implementation
15. Impact of social media
16. Comparative/Transcultural Linguistics
17. Human value ethics
18. Health and Happiness
19. Competency Mapping

NEP 2020 Implementation (New!)

1. Leadership FDP:
 - Sustainable Change Management
 - U.S Baldrige Education Performance Excellence Framework
 - Community Service Importance
2. Project Management
3. Risk Management
4. Soft Skills Excellence:
 - Leadership Excellence
 - Effective Decision Making
 - Effective Time management
 - Effective Teamwork
 - Effective Project Management
5. NEP 2020 Implementation - Sharing Successes and Failures

Mechanical Engineering

1. Machining & Micro Machining Processor
2. Simulation technique
3. Digital Manufacturing technology
4. Precision manufacturing
5. Robotic Process automation

Civil Engineering

1. Sustainable construction technology
2. Automation in civil engineering
3. Ground Improvement techniques
4. Numerical Modelling & soil structure interaction
5. Geotechnical earthquake Eng.

Electronics Engineering

1. Satellite Navigation system
2. Speech signal processing
3. Micro electronics
4. Optical communication
5. Cognitive Sensor Network
6. Nano Technology, materials & science
7. Sensor network for agriculture management
8. Clean Eng. Materials

Other innovative, emerging thrust areas