



**Dr. A. P. J. ABDUL KALAM TECHNICAL UNIVERSITY**  
(Formerly UP Technical University)  
Sector-11, Jankipuram Vistar Yojna, Lucknow-226031

Ref: AKTU/Dean-FET/2019/2150

Date: 02.08.2019

To,

The Directors/ Principals

All affiliated/Constituent Engineering colleges of

Dr. A.P.J. Abdul Kalam Technical University Uttar Pradesh, Lucknow

**Subject:** Call of proposals for conduct of Faculty Development Programs (FDPs) in Session 2019-20.

Dear Sir/Madam,

As you are aware that in order to enhance the quality of classroom delivery of academic programs being run and foster a better ecosystem for research and innovation in the institutions, the University has decided to conduct faculty development programs (FDPs) at large scale in different clusters of the state. For the purpose, the Institutions, similar to previous years, are requested to volunteer themselves for conduction of these FDP programs in the current academic session 2019-20 (**maximum TWO FDP proposals** from your institute).

You are requested to plan FDP Programs (**Preferably on Cutting edge technologies** such as Artificial Intelligence, 3D Printing, Deep learning, block chain, Mechatronics, Bio-medical engineering etc.) for the current academic session and submit the FDP proposals to the University for Approval **online through the hyperlink available in your college login** only. The link would be available from August 2, 2019. The Last date for submission of FDP proposals for the session 2018-19 is **August 25, 2019**.

Please note that speakers for FDP programs should be chosen from the Institutions of National Importance and Industry of the country. The approved FDP programs shall be governed by the annexed rules /regulations/norms/ conditions. The Institutions are requested to conduct the FDP Programs in the following dimensions as given below, however, the institutions located in remote areas are advised to propose the FDPs on content based.

1. Centre of Excellences based skill development FDPs
2. Pedagogy
3. Entrepreneurship, Incubation and Innovation
4. Outcome based Education
5. Library Resources (digital resources)
6. Research and Development
7. Content based (Suggestive subject areas are enclosed)

The relevant and required documents are attached as Forms 1 & 2 and Annexure 1, 2, 3 & 4. A list of suggested subject areas (indicative only) for FDP under content based dimension is also given for reference (Annexure-A).

Note: FDPs organised by Engineering departments in any of the above mentioned seven dimensions by affiliating Engineering colleges shall be funded through TEQIP-III fund and FDPs by non Engineering disciplines (of Engineering as well as non Engineering Institutes) on the above dimensions will be funded by AKTU directly. For any query please write to us on [fdp@aktu.ac.in](mailto:fdp@aktu.ac.in) mentioning the subject "Queries regarding FDP 2019-20"

With warm regards,

Yours Sincerely,

(Prof. J.B. Srivastava)  
Dean FET

Encl: As above

Copy for information and necessary action to:

1. Registrar, AKTU
2. Finance Officer, AKTU
3. Coordinator TEQIP-III AKTU
4. Staff officer Hon'ble Vice Chancellor for kind information to Hon'ble Vice Chancellor
5. Media Prabhari, AKTU

(Prof. J.B. Srivastava)  
Dean FET

# Dr A.P.J. Abdul Kalam Technical University, Lucknow

## Approved Rules/Regulation/Norms For Conduction of FDP Programs 2019-20

In order to enhance the quality of classroom delivery of academic programs being run and foster a better ecosystem for research and innovation in the Institutions, the University has decided to conduct faculty development programs (FDPs) at large scale in different clusters of the state in association with the affiliated Institutions. These approved FDP programs to be conducted by the concerned Institute shall be governed by following norms/rules/regulation/conditions.

S No.	FDP funded through TEQIP-III	FDP funded through AKTU directly
1	An FDP program shall be 30 hours program spread over 5 to 6 days. Minimum 30 participants to Maximum 60 participants shall be allowed to register in a FDP Program. Note- All participants must be from the affiliated institutes of AKTU.	An FDP program shall be 30 hours program spread over 5 to 6 days. Maximum 60 participants shall be allowed to register in a FDP Program. Note- All participants must be from the affiliated institutes of AKTU.
2	The speakers of an approved FDP program shall be paid an honorarium at a rate of Rs 2000=00 per hour (60 minutes) of lecture/practical class with a cap of Rs 5000 per day for persons from Institutions of National Importance (INIs), Industry Expert and institutions participating in TEQIP-III. In case of persons from non TEQIP Institutions an honorarium of maximum Rs 4000 per day shall be paid.	The speakers of an approved FDP program shall be paid an honorarium by the University at a rate of Rs 2000=00 per hour (60 minutes) of lecture/practical class with a cap of total 30 hours. The speakers shall also be reimbursed TA/DA by the University as per applicable rules. The FDP conducting Institution shall also be reimbursed by the University for the amount spent on Video Recording of the FDP Classes, if done so.
3	The speakers shall also be reimbursed TA/DA as per applicable rules. The FDP conducting Institution shall also be reimbursed for the amount spent for venue and logistic arrangements including video recording of the FDP with supported bills ( <b>Only GST bills</b> ).	Expanses done on venue and logistic arrangements would NOT be reimbursed.
4	The speaker / resource person should preferably of rank of Professor. However, maximum two Assistant Professors (having PhD Degree) only from the Institutions of National Importance (INIs) and institutions participating in TEQIP-III may be considered as speakers. In case of Industry Expert the experience must be minimum 05 years.	The speaker / resource person should preferably of rank of Professor.
5	Maximum amount that may be reimbursed by the University under TEQIP -III for a single FDP program is as follows.	Maximum amount that may be reimbursed by the University against a single FDP program is as follows. • Total Honorarium to the Speakers

	<p>a. Total Honorarium to the Speakers : Rs 60,000=00</p> <p>b. Total TA/DA to the Speakers, and videography &amp; photography : Rs 90,000=00</p> <p>c. Venue and logistics arrangements : Rs.10,000=00</p> <p>d. Funding to support Food expenses for Participants/Speakers: Rs 60,000=00 Total Amount (Max): <b>Rs 2,20,000=00</b></p>	<p>: Rs 60,000=00</p> <ul style="list-style-type: none"> <li>Total TA/DA to the Speakers and Videography :Rs 90,000=00</li> </ul> <hr/> <p>Total Amount (Maximum) : <b>Rs 1,50,000=00</b></p>
6	<b>Note:</b> Expenses on Videography and photography must be restricted to Rs. 20000 @Rs 4000 per day.	<b>Note:</b> Expenses on Videography and photography must be restricted to Rs. 20000 @Rs 4000 per day.
7	No Fees from the participants would be charged.	A registration fee of Rs 2000=00 per FDP shall be allowed to be charged from the participants. The registration amount shall be collected by the FDP conducting Institute themselves. The participants may be reimbursed the registration fee by their parent Institutions. The collected registration amount shall be spent by the Institute at their own level for food expenses and lodging arrangements for the participants during the period of the FDP program.
8	After successful completion of the FDP program, the FDP conducting Institute must submit the claim forms (in person or by post) on the prescribed Performa ( <b>Form-2</b> ) along with TA/DA form ( <b>Annexure-1</b> for TA/DA plus honorarium details) to the <i>Dean Faculty of Engineering &amp; Technology, Dr A.P.J. Abdul Kalam Technical University, Lucknow</i> <b>within ten (10) working days</b> from the conclusion date of the FDP. After this time line, the <b>claim file would not be accepted for further processing.</b>	After successful completion of the FDP program, the FDP conducting Institute must submit the claim forms (in person or by post) on the prescribed Performa ( <b>Form-1</b> ) along with TA/DA form ( <b>Annexure-1</b> for TA/DA plus honorarium details) to the <i>Dean Faculty of Engineering &amp; Technology, Dr A.P.J. Abdul Kalam Technical University, Lucknow</i> <b>within ten (10) working days</b> from the conclusion date of the FDP. After this time line, the <b>claim file would not be accepted for further processing.</b>
9	<b>The Institutes will not pay the beneficiaries directly.</b> The payments will be made in the beneficiary bank accounts electronically through PFMS of TEQIP-III. Format for details of beneficiary is given in <b>Annexure-2</b> (Personal Accounts for TA/DA claims) and <b>Annexure-3</b> (Commercial Accounts for Vendors). It is important to note that the University claim Forms for the experts honorarium and proper bills with GST in case of vendors must be filled in addition to Annexure-2 &	Institutes are advised not to pay the beneficiaries directly. If the Institute wants to pay the Vendors and Speakers directly from its end, then the Institute can request the DEAN FET AKTU for reimbursement as per the rules mentioned in Sr. no. 3, 4, 5 & 6. But in this case, the Institute has to cut the TDS (including the honorarium of speakers and vendors wherever applicable) and has to submit the declaration from the Director along with the supportive

	Annexure-3.	documents of TDS.
10	All the bills from the vendors <b>MUST</b> be made in the name of “ <b>Coordinator TEQIP-III, AKTU Lucknow</b> ”.	The bills from the vendors ( <u>If unpaid by the Institute</u> ) <b>MUST</b> be made in the name of “ <b>Finance Officer AKTU Lucknow</b> ”.
11	The Institute has to submit the declaration from Director in the prescribed Performa as per <b>Annexure-4</b> .	The Institute has to submit the declaration from Director in the prescribed Performa as per <b>Annexure-4</b> .
12	<b>NO provision for Advance Money</b>	<b>NO provision for Advance Money</b>

13. There is NO provision for Advance Money for hosting institutions for FDPs approved. All the payments for such a FDP shall be done after the successful conduction of the FDP subject to submission of claim for reimbursement
14. The FDP conducting Institutes shall arrange for breakfast, lunch and evening tea for the participants/speakers. The conducting institute shall also arrange for dinner and lodging facility to the Participants / Speakers interested to stay at the Institute during the period of FDP Program.
15. The travelling and other expenditure should be borne by the participants themselves.
16. The payments may be made in the beneficiary bank account electronically. Format for details of beneficiary is given in **Annexure-2** (Personal Accounts for TA/DA claims) and **Annexure-3** (Commercial Accounts for Vendors). It is important to note that the University claim Forms for the experts honorarium and proper bills with GST in case of vendors must be filled in addition to Annexure-2 & Annexure-3.
17. A set of all lectures delivered (Hard & Soft copy) by the speakers must be submitted with the reimbursement form along with a copy of the same to the Dean, FDP at university. Only after submission of the above mentioned lecture contents reimbursement will be processed.
18. The FDP conducting Institutes MUST send the FDP brochure, speakers list and relevant information to the [fdp@aktu.ac.in](mailto:fdp@aktu.ac.in), at least 15 days prior to the commencement of FDP.

**(On College Letterhead)**

**Form-1** (FDPs approved under direct funding of AKTU)

**Request of Payment against  
Faculty Development Program (FDP) 2019-20**

*(To be submitted to the Finance officer, Dr. A.P. J. Abdul Kalam Technical University, Lucknow after conduction of FDP program)*

**Note:** *To be filled separately for each FDP Program*

- 1. Name and Address of the Institute:**
- 2. Name of the Director:**
- 3. Contact Phone Number and Email of the Director:**
- 4. Official Email-ID of the College:**
- 5. Subject Area of the FDP:**
- 6. Period of FDP :** From (Date): \_\_\_\_\_ To (Date): \_\_\_\_\_
- 7. Name, Designation of the Coordinator for FDP:**
- 8. Name and Association of Speaker(s) For FDP:** Please attach the List of the speakers with their designation and address. Please also attach the Complete Schedule of the FDP Program.
- 9.**
  - a. Amount Spent:**
    - (i)** Honorarium paid to the Individual speakers:
    - (ii)** TA/DA paid to the Individual speakers \_\_\_\_\_ :
    - (iii)** Amount spent on Video recording (if any)  
\_\_\_\_\_ :
  - b. Amount Claimed :**  
***Note:** Please must enclose the detailed break up and bills/TA forms / honorarium along with the hard & soft copy of the lectures delivered by the speakers etc as annexure. Please use the University Performa for the payment of TA/DA and Honorarium*
- 10. Details of Bank Account**
  - a.** Institute Bank Account Number:
  - b.** Bank Name and Address \_\_\_\_\_ :
  - c.** IFSC Code of the Bank \_\_\_\_\_ :

**Declaration:** I hereby declare that aforesaid FDP has been conducted as per guidelines/circular of the University and amount of reimbursement claimed has been spent on the conduction of said FDP as per University guidelines/circular in this regard. I also confirm that the collection of lectures (Hard & Soft) has been submitted to the Dean, FET of the university.

**Signature and Seal of the Director**



## **Suggested Subject Area for conduction of FDP Program under Content based**

The purpose of FDPs are to enhance the classroom delivery of academic programs run by the University and improve the research and innovation capacity of the affiliated Institutions. Therefore, the subject area for conduction of FDPs should be chosen in such a manner that serves the said purpose. Following are brief list of subject area (although not limited to) in various disciplines that may be chosen singly or in combination for conduction of FDPs by the affiliated institutions.

### **Computer Science and Related Disciplines**

1. Theory of Automata
2. Data Structures and Algorithms
3. Design and Analysis of Algorithm
4. Principles of Programming Languages
5. Algebraic Structures
6. Distributed Systems
7. Distributed Algorithms
8. Computer graphics and Animation
9. Advanced Computer Architectures
10. Graph Theory
11. Cryptography
12. Performance Analysis of Computer Systems
13. Data Mining
14. Computer based Optimization Techniques
15. Human Computer Interaction
16. Computer Forensics and Cyber Crimes
17. Advance Database Management Systems
18. Computational Geometry
19. Advance Computer Networks
20. Computational Biology
21. Modeling and Simulation
22. Speech Recognition
23. Computer Vision
24. Natural Language processing
25. Data Management
26. Wireless and Sensor systems
27. Computational Complexity
28. Randomized Algorithms
29. Algorithmic Game Theory
30. Robotics
31. Augmented Reality
32. High performance Computing
33. Embedded Systems
34. Advance Operating systems
35. Service Oriented Architectures
36. Pervasive computing
37. Formal Methods
38. MATLAB tools
39. Pattern recognition
40. Digital Image processing
41. Machine Learning

### **Chemical Engineering and Related Disciplines**

42. Process Modeling and simulation of Chemical Equipments
43. Mass Transfer Operations in Chemical Engineering
44. Chemical reaction Engineering
45. Process Calculations in Chemical Engineering
46. Transport Phenomenon
47. Optimization Techniques in Chemical Engineering

48. Advance Chemical Engineering Thermodynamics
49. Advance Separation Technology
50. Bio Process Principles and Bio Chemical Engineering
51. Sustainable Technologies for Energy and Environment
52. Drinking water Production using Low Cost Technologies
53. Energy security of India - Role of Fossils and Renewable Energy

### **Civil Engineering and related Disciplines**

54. Fluid Mechanics
55. Hydraulics & Hydraulic Machines
56. Water Resources Engineering
57. Building Materials & Construction
58. Structural Analysis
59. Design of Concrete Structures
60. Design of Steel Structures
61. Construction Technology & Management
62. Surveying
63. Geo-informatics
64. Geotechnical Engineering
65. Transportation Engineering
66. Quantity Surveying & Estimation
67. Earthquake Resistant Design of Structures
68. Matrix Analysis of Structures
69. Advanced Concrete Design
70. Earth and Earth Retaining Structures
71. Bridge Engineering
72. Precast and Modular Construction Practices
73. Plastic Analysis of Structures
74. Transportation System and Planning
75. Rural Water Supply and Sanitation
76. Environmental Management for Industries
77. Environmental Geo-technology
78. Industrial Pollution Control & Environmental Audit
79. Engineering Hydrology
80. Open Channel Flow
81. Analysis and Design of Hydraulic Structures
82. Water Resources Systems
83. Groundwater Management
84. Tunnel Engineering
85. STAAD Pro
86. Advanced Foundation Design
87. Machine Foundation Design
88. Ground Improvement Techniques
89. River Engineering

### **Electrical Engineering and Related Disciplines**

90. Basic System Analysis

91. Electro-Mechanical Energy Conversions
92. Microprocessor
93. Advanced Microprocessor and Microcontrollers
94. Digital Signal Processing
95. Engineering System Analysis and Design
96. Engineering system Design Optimization
97. MATLAB and Its Application in Engineering
98. Power Theft and Energy Management
99. Smart Energy Delivery systems
100. Electromagnetic field Theory
101. Power System Operation Control
102. Project Management in Electrical engineering
103. Electric Drive

#### **Electronics Engineering and Related Disciplines**

104. Fundamental of electronic devices
105. Digital signal Processing
106. Network analysis and Synthesis
107. Signal and System
108. Electronics Devices
109. Electronic Circuits
110. Integrated Circuits
111. Electromagnetic field Theory
112. Antenna and Wave Propagation
113. Digital communication
114. Wireless and Mobile Communication
115. Optical communication and networks
116. Satellite communication
117. Telecommunication system Engineering Theory
118. VLSI for Signal Processing and Communication
119. Power Electronics
120. Architecture and applications of digital signal processors
121. Microwave Engineering
122. Nano Electromechanical Systems
123. VHDL

#### **Mechanical Engineering and Related Disciplines**

124. Finite element Methods
125. Engineering Mechanics
126. Fluid Mechanics
127. Mechanics of Solids
128. Applied Thermodynamics
129. Heat & Mass Transfer
130. I.C. Engines & Compressors

131. Machine Design
132. Manufacturing Science & Technology
133. Fluid Machinery
134. Computer Aided Design in Mechanical Engineering
135. Mechatronics
136. Project Management
137. Engineering Optimization
138. Product Development
139. Automation and Robotics
140. Power Plant Engineering
141. Automotive Pollution Control

#### **Architecture**

141. Intelligent Building
142. Profession and Academic Interface
143. Theory of Design
144. Smart Building
145. Recent and Modular Construction Technology
146. Low Cost Housing
147. Sustainable Building
148. Computer aided architectural design
149. Universal Design
150. Trends of Contemporary Architecture

#### **Mechatronics**

151. Mechatronics
152. Industrial Automation
153. Unconventional Manufacturing
154. Additive Manufacturing/3D Printing
155. Rapid Prototyping
156. Tribology
157. Advanced Manufacturing
158. Robotics and Automation
159. Sensors
160. Flexible manufacturing System\
161. MEMS
162. Biomechanics
163. Computation in Mechatronics
164. Computation in Machining & Manufacturing
165. Computation in Engineering applications
166. Relevant areas of Pharmacy
167. Relevant areas of Management
168. Any other relevant areas/topics

Please note that the above list of subject areas is indicative only. FDPs may be conducted in any relevant area that intersects with the stated purpose of the activity.



## **Documents required for submitting the claim of FDP to AKTU under University fund**

1. Completely filled Form-1
2. Summary of the bills.
3. List of speakers with brief Bio-data including their contact numbers, designation and affiliations.
4. Completely filled TA/DA forms (AKTU University format) with supportive documents.

**NOTE-** The TA/DA and honorarium claim of Speakers MUST be in University TA/DA claim form (**Annexure-1**). No other formats would be acceptable.

5. Registration Certificate (RC) of the vehicle (in case of own car) OR taxi bills with GST (in case of hired taxi) must be provided with TA bills of speakers.
6. The payments will be made in the beneficiary bank accounts electronically. The format for details of beneficiary is given in **Annexure-2** (Personal Accounts for TA/DA claims) and **Annexure-3** (Commercial Accounts for Vendors).
7. Bills of Vendors verified by the Director of the Institute.

**NOTE-** (a) The bills from the vendors MUST be in the name of “**Finance Officer, AKTU Lucknow**” (If unpaid by the institute)

(b) Bills from the vendors must be original and verified by the Director. Photocopy is not acceptable.

8. Annexure-4
9. Copy of office order for allotment of FDP by AKTU highlighting the corresponding FDP for which the Institute is submitting the claim form.
10. Detailed Outcome report of the FDP day wise and session wise.
11. The brochure of the FDP.
12. The attendance sheet (In original signed by the Speakers/expert) of the participants date wise verified by Director.
13. Videography and photography in CD/DVD.
14. Selected Photographs of the FDP (at least 2 per session covering the speakers also).
15. Feedback form from ALL the participants clearly mentioning the quality of speakers and their lecture for each session.

**NOTE-** All documents and bills (Original) must be verified by the Director of the Institute.

**Documents required for submitting the claim of FDP to AKTU under  
TEQIP-III**

1. Completely filled Form-2
2. Summary of the bills.
3. List of speakers with brief Bio-data including their contact numbers, designation and affiliations.
4. Completely filled TA/DA forms (**Annexure-1**) with supportive documents.  
**NOTE-** The TA/DA and honorarium claim of Speakers **MUST** be in University TA/DA claim form (**Annexure-1**). No other formats would be acceptable.
5. Registration Certificate (RC) of the vehicle (in case of own car) OR taxi bills with GST (in case of hired taxi) must be provided with TA bills of speakers.
6. The payments will be made in the beneficiary bank accounts electronically. The format for details of beneficiary is given in **Annexure-2** (Personal Accounts for TA/DA claims) and **Annexure-3** (Commercial Accounts for Vendors).
7. Originals bills of the Vendors verified by the Director of the Institute.

**NOTE-** (a) The bills from the vendors **MUST** be in the name of “**Coordinator TEQIP-III, AKTU Lucknow**”.

(b) Bills from the vendors must be original and verified by the Director. Photocopy is not acceptable.

8. Annexure-4
9. Copy of office order for allotment of FDP by AKTU highlighting the corresponding FDP for which the Institute is submitting the claim form.
10. Detailed Outcome report of the FDP day wise and session wise.
11. The brochure of the FDP.
12. The attendance sheet (In original signed by the Speakers/expert) of the participants date wise verified by Director.
13. Videography and photography in CD/DVD.
14. Selected Photographs of the FDP (at least 2 per session covering the speakers also).
15. Feedback form from ALL the participants clearly mentioning the quality of speakers and their lecture for each session.

**NOTE-** All documents and bills (original) must be verified by the Director of the Institute.

## Checklist for submitting the claim of FDP to AKTU under University Fund

**Note: Attach the checklist also while submitting the claim file to AKTU.**

S No.	Documents	Yes/ No
1	Completely filled Form-1	
2	Detailed Summary of the bills.	
3	List of speakers with brief Bio-data including their contact numbers, designation and affiliations.	
4	Completely filled TA/DA forms ( <b>Annexure-1</b> ) with supportive documents.	
5	Registration Certificate (RC) of the vehicle (in case of own car) OR taxi bills with GST (in case of hired taxi) must be provided with TA bills of speakers.	
6	<b>Annexure-2</b> (Personal Accounts for TA/DA claims)	
7	<b>Annexure-3</b> (Commercial Accounts for Vendors)	
8	<b>Annexure-4</b>	
9	Originals bills of the Vendors verified by the Director of the Institute.	
10	The bills from the vendors MUST be in the name of “ <b>Finance Officer, AKTU Lucknow</b> ”.	
11	Copy of office order for allotment of FDP by AKTU highlighting the corresponding FDP for which the Institute is submitting the claim form.	
12	Detailed Outcome report of the FDP day wise and session wise.	
13	The brochure of the FDP.	
14	The attendance sheet (In original signed by the Speakers/expert for corresponding session) of the participants date wise verified by Director.	
15	Videography and photography in CD/DVD.	
16	Selected Photographs of the FDP (at least 2 per session covering the speakers also).	
17	Feedback form from ALL the participants clearly mentioning the quality of speakers and their lecture for each session.	

## **Checklist for submitting the claim of FDP to AKTU under TEQIP-III**

**Note: Attach the checklist also while submitting the claim file to AKTU.**

<b>S No.</b>	<b>Documents</b>	<b>Yes/ No</b>
1	Completely filled Form-2	
2	Summary of the bills.	
3	List of speakers with brief Bio-data including their contact numbers, designation and affiliations.	
4	Completely filled TA/DA forms ( <b>Annexure-1</b> ) with supportive documents.	
5	Registration Certificate (RC) of the vehicle (in case of own car) OR taxi bills with GST (in case of hired taxi) must be provided with TA bills of speakers.	
6	<b>Annexure-2</b> (Personal Accounts for TA/DA claims)	
7	<b>Annexure-3</b> (Commercial Accounts for Vendors)	
8	<b>Annexure-4</b>	
9	Originals bills of the Vendors verified by the Director of the Institute.	
10	The bills from the vendors MUST be in the name of “ <b>Coordinator TEQIP-III, AKTU Lucknow</b> ”.	
11	Copy of office order for allotment of FDP by AKTU highlighting the corresponding FDP for which the Institute is submitting the claim form.	
12	Detailed Outcome report of the FDP day wise and session wise.	
13	The brochure of the FDP.	
14	The attendance sheet (In original signed by the Speakers/expert for corresponding session) of the participants date wise verified by Director.	
15	Videography and photography in CD/DVD.	
16	Selected Photographs of the FDP (at least 2 per session covering the speakers also).	
17	Feedback form from ALL the participants clearly mentioning the quality of speakers and their lecture for each session.	