

Centre for Development of Advanced Computing (C-DAC)

A Scientific Society under the Ministry of Electronics & Information Technology (MeitY), Government of India

C-DAC Pune

Innovation Park 34, B/1, Panchawati Rd, Panchawati, Pashan, Pune, Maharashtra 411008 Website: www.cdac.in

Application/Proposal/EOI

for

Empanelment of Spokes for FutureSkills PRIME Upskilling Programmes on Emerging Technologies

Augmented & Virtual Reality (AR VR)

and

Artificial Intelligence (AI)

The document may be downloaded from www.cdac.in

Proposal No.: CDACP/Prop/FSP/SPOKEs/	Date:
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Application/Proposal/EOI

Empanelment of Spokes for FutureSkills PRIME Upskilling Programmes on Emerging Technologies (ARVR and AI)

- Application are invited by C-DAC Pune for Empanelment of Spokes for FutureSkills
 PRIME Upskilling Programmes in Emerging Technologies Augmented & Virtual
 Reality and Artificial Intelligence.
- 2. This Proposal is divided into following two parts:
 - a) **Part I –** Essential Details of the Items / Services required.
 - b) **Part II** Standard Conditions of Application.
- 3. The address and contact numbers for seeking clarifications regarding this Proposal are as follows:

Head of Department,

Advanced Computing Training School (ACTS),

Centre for Development of Advanced Computing (C-DAC),

Innovation Park 34, B/1, Panchawati Rd,

Panchawati, Pashan, Pune,

Maharashtra 411008

Email ID: inquiry.fsp.pune@cdac.in

Contact #: 020-2550 3135

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PART I - ESSENTIAL DETAILS OF SERVICES REQUIRED

1. Introduction

Centre for Development of Advanced Computing (C-DAC), Pune invites "Application" from interested entities/institutions for empanelment as "Spoke" for FutureSkills PRIME Upskilling Programmes in Emerging Technologies – Augmented & Virtual Reality and Artificial Intellegence.

2. About C-DAC Pune

C-DAC, as the premier Scientific Society of Ministry of Electronics and Information Technology (MeitY), Government of India has attained a vantage position in the area of ICTE through its applied pioneering research in the last three decades.

C-DAC, Pune occupies a special place in the evolution of the organization as a premier hub for cutting edge R&D. Bestowed with the distinction of being the first C-DAC centre to be established in the country, C-DAC, Pune has been at the forefront of the organizations R&D initiatives and spearheading several national programmes of strategic importance. C-DAC, Pune is credited for the first indigenously developed PARAM supercomputer and establishing the nationas credentials as an enabler of advanced technologies. While placing India on the select world map of supercomputing nations, C-DAC, Pune has continued to pioneer the open frame architecture to deliver PARAM Yuva, which was also India's fastest supercomputer and rated 64 among world's top supercomputers.

3. About FutureSkills PRIME (FSP)

Ministry of Electronics and Information Technology (MeitY) and NASSCOM have jointly conceived the "FutureSkills PRIME (Programme for Re-skilling/Up-skilling of IT Manpower for Employability)". It aims to create a re-skilling/up-skilling Ecosystem in Emerging and Futuristic Technologies. The Programme provides re-skilling/ up-skilling opportunities in 10 Emerging Technologies, including Augmented & Virtual Reality, Artificial Intelligence.

Under this programme, C-DAC Pune is identified as a Lead Resource Centre (LRC) for **Augmented & Virtual Reality and Artificial Intelligence** technologies. A brief overview of the currently available courses is attached as **Annexure-A**. In future, new



courses are likely to be added which will be updated in the FutureSkills PRIME platform and will be communicated to the empanelled Spokes.

The programme offers a robust blended learning platform to encourage anytime, anywhere, self-paced learning. It is proposed to leverage the existing PAN-India presence and skilling capabilities of training providers through a blended-learning framework in Hub-n-Spoke model.

4. Eligibility Criteria of entities for empanelment as a Spoke:

A "Spoke" is a partnering establishment / institute / company to assist C-DAC Pune in executing FutureSkills PRIME programme to achieve its targets complying with the Terms and Conditions stipulated by C-DAC Pune.

The eligibility criteria of an entity (Training Institutes, Educational Institutions, and Universities) to be considered for empanelment as a "Spoke" include the following.

- 1. College/Educational Institute recognized under relevant university ACT & All India Council for Technical Education (AICTE) with 05 years good standing.
- 2. Should have at least 05 years of experience of running courses in Computer / Information Technology
- 3. Should have at least 04 full time faculties with teaching experience of at least 02 years in the field of computer programing languages
- 4. Adequate training infrastructure should be available in Collage/Institute
- 5. Should have placement cell

5. Scope of Work of Spoke

The following is the scope of the work for the empanelled upskilling partner (Spoke).

- a) Mobilization, Pre-Counselling and Registration of the eligible candidates
 - Eligibility criteria for candidates

The **target beneficiaries** of FutureSkills PRIME upskilling programmes include

- Engineering students with a job/internship offer in hand
- Fresh recruits of IT Firms
- Faculty of colleges
- Employees in IT and Non-IT Firms
- Non-IT employees aspiring to use emerging technologies in their respective domains



- o Re-skill/Up-skill employees who have become time irrelevant
- Central/State Government Employees including PSUs and Autonomous bodies
- Publicity through possible media for attracting the prospective candidates
- Counselling the aspirants towards the opportunities in the identified emerging technologies (Augmented and Virtual Reality, Artificial Intelligence.).
- To extend support functionalities through email and toll-free numbers (if available).
- Leverage institutional facilities and networks to reach out to the eligible candidates

b) Syllabi, Material and Infrastructure

- The syllabi and the course material for the identified upskilling programmes will be provided by the Lead Resource Centres in their respective technologies.
 The identified Spoke should comply with the syllabi and the specified course content and duration for each of the courses.
- The course includes a total of 120 Hrs course with a blend of Instructor Led training and self-paced learning through video modules of 50-60 hours and virtual lab facilities of 70-60 hours provided by Lead Resource Centres in their respective technologies.
- The Spoke should guide the registered learners throughout the course duration. Mentoring sessions need to be conducted. In case of course on Augmented Virtual Reality & Artificial Intelligence technology, the Spoke has to ensure the availability of the infrastructure (Hardware and Software tools) as formulated by C-DAC Pune.

c) Upskilling process

- The Spoke shall ensure the enrolment of the candidate and the payment of prescribed course fee on the FutureSkills Prime portal https://futureskillsprime.in/.
- The Spokes should adhere to the schedules of Classroom/Virtual Classroom sessions scheduled by C-DAC Pune.
- All trainers on boarded by the Spokes are to undergo Training of the Trainers (ToT) and certification by Lead Resource Centres.



The Spoke has to appoint and intimate to C-DAC Pune an existing senior staff
as the single point of contact (SPOC) who in addition to his/her other
responsibilities, shall monitor the compliance of Spoke with the regulations
stipulated by C-DAC Pune.

d) Upskilling execution

- Projection/Planning of participant students Post empanelment of SPOKE center on Monthly/quarterly/half yearly/yearly basis
- Upskilling may be conducted in a Blended mode involving conventional classroom sessions and on online mode for both theory and lab.
- Direct feedback from the learners will be obtained by Lead Resource Centres (LRCs). The quality of upskilling shall be maintained throughout.
- Spokes shall make available all the records on time, related to the upskilling, including candidate mobilization, registration, attendance, quizzes, assignments etc. for inspection as and when demanded.
- Spokes shall compile and send the month wise records of candidate registration, attendance etc.to C-DAC Pune at regular intervals and in the format prescribed by C-DAC Pune.

e) Assessment, Certification and learner incentives

- After the successful completion of the course by the learners, Lead Resource
 Centres of the respective courses shall issue the course completion letter
 based on the responses of learner for assignments, quizzes and other internal
 assessment components.
- After the completion of the course by a learner, Spoke shall endeavor to convince the learner to take and clear the assessment. The Spoke should disseminate that learners should clear the assessment to receive a certificate.
 The assessment would be carried out by a third-party agency appointed by NASSCOM.
- The assessment of the learners would be carried out through online proctored mode by the third-party agency of NASSCOM.
- The learners are allowed to attempt any number of times to clear the assessment by paying INR 600/- (inclusive of all taxes) for every attempt.
- GOI Incentive for Assessment fee reimbursement: Learners who successfully clear the assessment in the first attempt are eligible for the Government of India incentive of ₹600/- processed by NASSCOM's



- FutureSkills PRIME (FSP) platform through direct transfer in the bank account of the learner, in accordance with the terms and conditions.
- gets certified for a Bridge course, s/he could avail a maximum incentive amount of ₹3,000/- (inclusive of all applicable taxes), which will get transferred into the learner's bank account (via DBT process) through the FutureSkills PRIME (FSP) platform on successful certification by NASSCOM. The ceiling w.r.t. the incentive per course would be limited to 50% of the course fee paid by the learner subject to a maximum of ₹3000/- (inclusive of all applicable taxes).



6. Incentive for Spoke

a. Every empaneled Spoke is eligible for an incentive mechanism of 64% of the course fee per learner, as received by C-DAC Pune, subject to satisfactory fulfillment of required quality and quantitative metrics laid down as part of the FSP program.

An indicative revenue sharing model is presented below.

Sr. No.	Total Fees (Excluding GST)	SPOKE	C-DAC
	100%	64%	36%
1	3390.00	2169.6	1220.4
2	67.80	43.39	24.41

- # Promo code discount facility may be provided/availed by SPOKE up to 98% of course Fee (as illustrated in Sr. No. 2 in above table).
- # Fee Sharing will be done only on final Fee paid by candidates.
- # Share of fee will be reimbursed to the respective stakeholder only when candidate completes course successfully and obtains a certificate.
- # SPOKE will raise invoice monthly basis.
- b. The Spoke would submit an invoice for the number of learners who have successfully completed the course and have obtained the certificate. Payment would be processed within 30 days of submission of invoice, subject to fulfilment of requirements.
- c. Payment is subject to applicable taxes.
- d. If payment to Spoke is not made by C-DAC Pune, in accordance with the terms hereof, the Parties shall, in good faith, take necessary measures to determine the causes of delay and resolutions thereof.



7. Empanelment Process

- a. The application (in a format given at **Annexure-1**), complete in all aspects, received from the respondent entities will be evaluated by a committee constituted by the competent authority of C-DAC Pune to determine the qualified entities (as per eligibility and attachments to be submitted).
- b. The evaluation criteria in the selection of the Spoke is based on the fulfillment of all eligibility criteria, number of trained faculties and Infrastructure.
- c. Committee may visit the institute premises before recommendation.
- d. All the successful entities/organizations/institutions will be empaneled as Spokes with C-DAC Pune for conducting both the courses under FutureSkills PRIME project.
- e. The empanelment will initially be for a period of one year and shall be renewed on satisfactory performance as determined by C-DAC Pune through a due review process in steps of one year.
- f. Monthly reviews shall be conducted to ascertain the performance of the Spoke.
 CDAC team and submit the committee report for further action.
- g. C-DAC Pune will issue a letter of Authorization as a SPOKE centre under FS Prime programme.
- h. There is no registration/authorization fee for empaneled SPOKE center.
- i. There is no processing fee for submission of application/proposal/Eol.
- j. C-DAC reserves the right to modify or cancel any parts of this document.



PART II - STANDARD CONDITIONS OF APPLICATION

The applicant institute should confirm the acceptance of the Standard Conditions of this Application/Proposal presented below which will form part of the empanelment.

- **1. Law:** The empanelment shall be considered, governed and interpreted in accordance with the laws of the Republic of India.
- 2. Effective date of the Empanelment: The empanelment shall come into effect from the date issuing of letter of authorization as a SPOKE and shall remain valid for 01 year or concurrent with the FutureSkills PRIME Project end date (project is set to complete on December 2023 as on date and may get extended), whichever is earlier or SPOKE is removed from the empanelment because of under /non- performance (no proven outcomes mutually agreed by both the parties).

3. Dispute Resolution:

- **a.** Amicably between both the parties with Executive Director, C-DAC & Head of the SPOKE College/Educational Institute or their nominees.
- **b.** If the Parties fail to bring about an amicable settlement then dispute shall be referred to Director General, C-DAC for his/her opinion.
- **c.** In case any one or both the parties do not agree or is not satisfied then:
 - i. Dispute shall be referred to AMRCD if both the parties are in its ambit
- ii. Dispute shall be referred to Arbitrator. The parties to the dispute will share the cost of proceedings equally. The language of proceedings shall be English. The award given by the arbitrator shall be final and binding on the Parties.
- **4. Non-disclosure of empanelment documents:** Except with the written consent of C-DAC Pune / bidder, other parties shall not disclose any provision, specification, plan, design, pattern, sample or information thereof to any third party.
- **5. Termination of empanelment:** C-DAC Pune shall have the right to terminate this empanelment in part or in full in any of the following cases:
 - **a.** Either party can terminate the empanelment by giving the notice of 30 days
 - **b.** The applicant is declared bankrupt or becomes insolvent.



- c. C-DAC Pune has noticed that the applicant has utilized the services of any Indian/Foreign agent in getting this empanelment and paid any commission to such individual/company etc.
- **d.** Under-performance (no proven outcomes) of the applicant.
- 6. Transfer and Sub-letting: The applicant has no right to give, bargain, sell, assign or sublet or otherwise dispose of the empanelment or any part thereof, as well as to give or to let a third party take benefit or advantage of the present empanelment or any part thereof.
- 7. Patents and other Industrial Property Rights: All the IPRs with reference to the course structure, video contents, handouts and all other materials is owned by C-DAC Pune/Lead Resource Centre, as the case may be.
- **8. Non-exclusive agreement :** The work to be provided to the empaneled Spokes by C-DAC Pune pursuant to this Application/Proposal shall be non-exclusive.

9. C-DAC Pune's Right to amend / cancel

- C-DAC Pune reserves the right to amend the Eligibility criteria, Scope of work, commercial Terms & Conditions, Scope of Service etc.
- ii. C-DAC Pune reserves the right to cancel the entire Application/Proposal without assigning any reasons thereof.

10. Corrupt or Fraudulent Practices

- i. It is expected that the applicant who wish to apply for this project have highest standards of ethics.
- ii. C-DAC Pune will reject application if it determines that the applicant recommended for award has engaged in corrupt or fraudulent practices while competing for this empanelment.
- iii. C-DAC Pune may declare an entity ineligible, either indefinitely or for a stated duration, to be awarded an empanelment if it at any time determines that the entity has engaged in corrupt and fraudulent practices during the award / execution of empanelment.



11. Force Majeure clause

Neither party shall bear responsibility for the complete or partial non-performance of any of its obligations, if the non-performance results from such Force Majeure circumstances as Flood, Fire, Earthquake and other acts of God as well as War, Military operation, blockade, Acts or Actions of State Authorities or any other circumstances beyond the parties control that have arisen after the conclusion of the present empanelment.



Annexure-A Overview of offered courses

I. Course: Introduction to Augmented and Virtual Reality

The objective of this course is to provide the student with an expertise in Augmented and Virtual Reality Development. This course includes the following modules: C# Programming concepts; Unity Game Engine concepts, VR Development (Google Cardboard, Oculus VR SDK); Vuforia AR SDK; AR Foundation (ARKit, ARCore); HTML5 & CSS3; A-Frame, Spark AR Studio. After completing this course, the student will be able to design and develop AR applications for Android and iPhones; VR applications for Google Cardboard, Oculus VR Headsets (Oculus Rift S, Oculus Quest); AR VR Applications for Web; AR Effects for Instagram and Facebook

For more information and updates on course fee, visit https://tinyurl.com/68e8hztr

II. Course: Introduction to Artificial Intelligence

The objective of this course is to provide the student with an expertise in Artificial intelligence. This course includes modules like Data science & programming tools, Machine Learning, Deep Learning and Natural Language Processing etc. These all modules will cover Python, Database systems and tools statistics in Data Analysis, Data Analytics & Visualization, Data Pre-processing techniques, Types of learning, various Machine Learning algorithms, Ensemble methods, Artificial Neural Network, Deep Neural Network, Natural Language Processing methods, Open CV. The last module contains an industry relevant project.

For more information and updates on course fee, visit https://tinyurl.com/yshj2m33



Annexure-1

Proforma for Submission of Application for Empanelment as a Spoke for FutureSkillsPRIME

<Entity Letter Head >

<ref. no=""></ref.>		<date></date>
From		
Centre for Dev Innovation Par	tment, nputing Training School, elopment of Advanced Comput k, Panchawati, Pashan, Maharashtra, INDIA	ing (C-DAC)
Sub: Submis programme	ssion of proposal for empanelmen	t as Spoke for Future Skills PRIME
Sir/Madam,		
	ction to the organization, year of eourses offered etc. >>	establishment, areas of work, educational
	ed in engaging with C-DAC, Pune course to the eligible candidates	as Spoke for the FutureSkillsPRIME and under both the technologies
	Artificial Intelligence Technology	
	Augmented & Virtual Realty Tec	hnology
We, M/sproposal agains		horised signatory) having registered office at ducational Institute) herewith submit our
Designation: Mobile Date of Signatu	son's Signature re:	· ·
Stamp		

List of Enclosures

1. Self-certified copy of legal registration certificate, as applicable.



- 2. Copy of PAN card
- 3. Audited Balance Sheet of last two financial years
- 4. Affiliation certification, if any
- 5. Accreditation certificate, if any
- 6. Letter of Authorisation, if documents are not signed by the Authorised Signatory
- 7. Organisation brief (on letter head of institute) covering details of professional expertise, infrastructure availability, training track record, projects handled in Skill Development in the last 2 years (if any), Training & placement cell etc.
- 8. Details of nodal person/Single contact person for all communication (Name, Mobile number, Landline Number, Email ID) on letter head of the institute
- 9. Declaration of availability of 04 faculties having experience & eligible as mentioned in **Annexure-1(B)**
- 10. Proposed plan for mobilisation of the eligible candidates for the courses. (refer *Part-I Point# 4* of above eligibility criteria).
- 11. Any other information relevant to skill development, with supporting documents
- 12. Certificate of acceptance of Empanelment conditions (Annexure-1(C)).
- 13. Declaration by the Authorized signatory for not having been black-listed by any Government / Semi- Government Organization during the last two years.
- 14. Confidentiality certificate (Annexure-1(D)).



Annexure-1(B)

Training Infrastructure:

- Minimum 10 number of Computers (1:1) with following specifications,
- i5, 8 GB RAM, 2TBSATA, Windows, Linux
- Internet Connectivity: Good & stable internet connectivity
- Projector, Webcam, Speaker, Printer & Scanner

Faculty Members

1. Identify the eligible faculty members as per following eligibility criteria:

Eligibility Criteria for faculty member:

Phd/M-Tech/ MCA / B.E/ B. Tech / M.Sc in Computer Science or Information technology having sufficient knowledge on Augmented and Virtual Reality Tech and Artificial Intelligence.

- 2. Eligibility Criteria for Lab Instructor:
 - BE/ B-Tech in computer Science or Information technology having sufficient knowledge in Augmented and Virtual Reality Tech and Artificial Intelligence
- 3. Share the nomination forms of eligible faculty members as per format provided by Lead RC (Hub).
- 4. Ensure the participation of faculty members in Training and Assessment.
- 5. Maximum two faculty members per batch may participate in ToT Programme.
- 6. Only certified faculty members are eligible to conduct courses under FutureSkills PRIME.

Conduct of course

- 1. Software tools in Lab: As per Source Book.
- 2. Conduct the course in Blended Learning Mode through FutureSkills PRIME Platform.
- 3. Conduct the course as per calendar.
- 4. To monitor the attendance, performance, feedback, participation of every student and guide them whenever necessary.



Annexure-1(C)

CERTIFICATE OF ACCEPTANCE OF EMPANELMENT CONDITIONS (On Institute/organization Letter Head. To be signed by Head of the institution/ equivalent)

Date:					
To The HoD Advanced Computing Training School (ACTS), Centre for Development of Advanced Computing (C-DAC) Innovation Park, Panchawati, Pashan, Pune 411008, Maharashtra, INDIA					
ACCE	ACCEPTANCE OF TERMS & CONDITIONS OF EMPANELMENT				
Propo Name	sal Reference No of Proposal Work				
Dear I	Madam/Sir,				
1.	I/We have downloaded/obtained the proposal documents for the above mentioned Work from the website(s) namely: advertisement, given in the above mentioned websites(s).				
2.	I/We hereby certify that I/We have read entire terms and conditions of the proposal documents from Page No_ to_ (Including all documents like annexures, etc, which form part of the proposal and I/we shall abide hereby the terms /conditions/clauses contained therein.				
3.	I/we hereby unconditionally accept the proposal conditions of above mentioned proposal document(s)/corrigendum(s) in it's totality/entirely.				
4.	In case any provision of the proposal is found violated, your department/organization shall be at liberty to reject this proposal and we shall not have any claim/right against depot in satisfaction of this condition.				
Place: Date:	(Signature of the HoD/Equivalent with Rubber Stamp of the Institute)				



Annexure-1(D)

CONFIDENTIALITY CERTIFICATE

It is certified that the Company or any representative of the Institute authorised by C-DAC Pune will not disclose any information gained by them or their representatives, while interacting with C-DAC Pune or with the persons of the client or any documents prepared in connection with the project or any documents received by them or any study carried out by them, directly or indirectly to any person or company or institution or press.

Place:	Company Seal
Date:	(Authorised Signatory of Institute)