# **Department of Computer Science & Engineering**

## **Indian Institute of Technology Patna**

## SELECTION PROCESS PROPOSAL FOR ADMISSION IN TO Ph.D. PROGRAM IN THE SPRING SESSION OF THE ACADEMIC YEAR 2018 – 2019 and ONWARDS

1. Pr	1. Proposed Selection Process:					
(a)	Only Interview:	Direct Admission Criteria				
(b)	Written Test and followed by Interview: (Interview should be held on the same day of the written test or on the next day)	Date of Written Test/Interview: 11.12.2018 (Tuesday) Timing of Written Test: 10:00 Timing of Interview: 14:00 Venue: IIT Patna Total Marks for written and Interview: 100 Written Test:  #1) MCQ Questions with negative marking (Penalty of 25% for each wrong answer) (70% of written test) #2) Fill in the blank types questions (No penalty for wrong answer) (30% of written test)				
(c)	Selection Criteria for short-listing candidates for the Interview if it is following the Written Test:	<b>Cut-off marks:</b> Cut-off marks for each category (Institute fellowship, sponsored candidates, CSIR/JRF/Visvesvaraya and project fellows) will be same. The candidate must obtain at least 30% marks in written. Moreover, final cut-off marks of written test will be decided based on the performance of the candidates appearing for the written test.				
(d)	Interview Panel formation and opting for a panel	There will be three panels 1) Application 2) Theory 3) System provided that at least three faculty members opted for a panel. Each faculty can join any one of these three panels. A panel with less than three faculty members will be merged with any other panel. Candidates selected for interview must choose one of these three panels. There will be a separate project panel consists of all the PIs of projects and any other member selected by any PI. Student opted for project may have to appear for another round of interview in the project panel.				
(e)	Evaluation and selection in Interview.	A candidate will be evaluated by the panel members selected by candidate. In case two panels merged, all members belong to merged panel will evaluate. Weightage for Written Test and Interview will be same (50% for each). Marks of all the panels will be merged in a single file and a single list of selected candidates will be published. Project panel will find the suitability of candidate for a specific project.				

2. Short-Listing Criteria for Ph.D. Interview/ Written Test & Interview:

Candidates must satisfy the minimum educational qualification & other requirements as mentioned in the advertisement. In addition to that the

a. **REGULAR AND FULL-TIME** 

#### b. **INSTITUTE FELLOWS**

candidates need to satisfy the following criteria.

- c. M.Tech./M.E/M.S. degree in a Engineering/Technology (Relevant Disciplines: CS/IT/EC/EE/Maths & Comp), with a minimum CPI of 6.5 or 60% of marks and *first-class* throughout, however, candidates with more than one undergraduate degree must have first class at least in one undergraduate degree. (Relaxation: One second class in preceding degree will be allowed if candidate holds Masters' from IIT/IISc/ISI. Another second class either in level X or level X+2 will be allowed provided the candidate scored minimum CPI of 7.5 or 70% marks in M.Tech/M.E/M.S). Candidate must have any GATE rank.
- d. Bachelor's degree in Engineering/Technology in a relevant discipline (from any Institute other than IITs) or MCA or MSc in a relevant discipline with CPI of 8 or 75% with valid CS GATE score with *first class* throughout, however, candidates with more than one undergraduate degree must have first class at least in qualifying undergraduate degree. (**GATE Rank**: Not more than 5000 for general candidate and not more than 6000 for SC, ST and PD category.). (Relaxation: One second class either in level X or in level X+2 will be allowed provided the candidate scored minimum CPI of 8.5 or 80% marks in qualifying graduate degree).
- e. BTech from IITs with CGPA 8.0 and above are exempted from GATE qualification. (Relaxation: One second class either in level X or in level X+2 will be allowed)
- f. Bachelor's degree from any Indian Institute of Technology (IIT) in a relevant discipline with a minimum CPI of 7 with first class throughout (**Relaxation**: Second class in any one preceding degree will be allowed. Another second class either in level X or in level X+2 will be allowed provided the candidate scored minimum CPI of 7.5 or 70% marks in qualifying graduate degree).
- g. M.Stat/M.Math with a minimum CPI of 6.5 or 60% with *first class* throughout however, candidates with more than one undergraduate degree must have first class at least in one undergraduate degree. (Relaxation: One second class either in level X or level X+2 will be allowed provided the candidate scored minimum CPI of 7.5 or 70% marks in M.stat/M.math).
- h. Age Criteria: Upper age limit is 28 years (for candidates with B.Tech./B.E./M.Sc./MA/MCA/MBA) and 32 years (for candidates with M.Tech./M.E./M.S./M.Phil.). The age will be calculated w.r.t. the advertisement closing date.

**Direct Admission:** The Institute may admit exceptionally bright students as full-time Institute Fellows directly (i.e., without written Test only through interview) into the PhD program, subject to meeting the following eligibility criteria:

- i. B.Tech from IITs/IISc who have graduated with a degree in the relevant discipline within last five years with a CPI/CGPA of 8/10 and above.
- j. Masters from IITs/IISc who have graduated with a degree in the relevant discipline within last five years with a CPI/CGPA of 8.5/10 and above and with a GATE rank.

### General Category:

#### k. PROJECT STAFF

- I. The remaining duration of the project at the time of admission should be at least two years.
- m. If the project gets completed before the student completes her/his PhD Programme, her/his category will be converted to that of **SELF-FINANCED** unless she/he is granted an assistantship/fellowship from the Institute or any other agency.
- n. Other eligibility criteria are same as institute fellow category.

## o. JRF/SRF FELLOWS

- p. The candidate receives fellowship from any government recognized funding agencies, such as CSIR, UGC, DBT, NBHM, DST (INSPIRE programme), etc.
- q. Other eligibility criteria are same as institute fellow category. However, age criteria is as per the funding agency norm, if there is no norm of funding agency, then institute norm will be applicable.

### r. VISVESVARAYA SCHEME(FULL-TIME)

- s. The candidate will receive fellowship from Visvesvaraya scheme.
- t. Other eligibility criteria will be same as institute fellow category. However, age criteria and requirement of GATE is as per the funding agency norm, if there is no norm of funding agency, then institute norm will be applicable.

### u. SPONSORED (FULL TIME)

- v. Sponsored by a recognized industrial R&D organization, academic institution (universities/colleges), government organization (defense or other ministries of the Government of India or any other government organizations including PSUs and autonomous bodies) or reputed industries (as may be recognized by this Institute)
- w. Must be a regular employee of the sponsoring organization with at least two year of professional experience in the respective field
- x. Bachelor's degree in Engineering/Technology in a relevant discipline or MCA or MSc in a relevant discipline with CPI of 8 or 75% with *first class* throughout **without GATE score** is **allowed.**
- y. Other eligibility criteria are same as institute fellows. However there will be no age criteria
- z. The candidate needs to produce **NOC** from the employer at the time of joining. The NOC should clearly mention the followings-

- aa. that she/he has been officially released from her/his duties for purpose of joining the PhD program and has been granted leave for the required period;
- bb. that her/his services shall be retained with the employer.

#### cc. PART TIME

#### dd. EMPLOYED PART TIME

- a. A student in this category is a professionally employed person (including the staff of IIT Patna), who pursues the PhD Programme while continuing the duties of her/his service.
- b. The minimum residential requirements are one or two semesters depending on the completion of mandatory course work required for PhD students.
- c. Bachelor's degree in Engineering/Technology in a relevant discipline or MCA or MSc in a relevant discipline with CPI of 8 or 75% with *first class* throughout **without GATE score is allowed.**
- d. Other eligibility criteria are same as institute fellows. However there will be no age criteria.
- e. Candidate should be an employee of current organization for at least last two years.
- f. The candidate needs to produce **NOC** from the employer at the time of joining. The NOC should clearly mention the followings
  - i. that she/he has been officially released from her/his duties for purpose of joining the PhD program and has been granted leave for the required period;
  - ii. that her/his services shall be retained with the employer.
  - iii. Candidate must have 2 years of experience from current employer

#### ee. VISVESARAYA SCHEME(PART-TIME)

- a. The minimum residential requirements are one or two semesters
- b. Candidates must have two years of experience.
- c. If working then the candidate needs to produce **NOC** from the employer at the time of joining. The NOC should clearly mention the followings
  - i. that she/he has been officially released from her/his duties for purpose of joining the PhD program and has been granted leave for the required period;
  - ii. that her/his services shall be retained with the employer.
  - iii. Candidate must have 2 years of experience from current employer
- d. Other eligibility criteria will be same as institute fellow category. However there will be no age criteria

#### **OBC Category:**

- i) 5 years age relaxation will be provided to Institute Fellows.
- ii) The other criteria will be same as general category criteria.

PD:	<ul> <li>i) Relaxation up to 55% marks (or CPI 6.0) in one preceding degree.</li> <li>ii) 5 years age relaxation will be provided to Institute Fellows.</li> <li>iii) Candidate with bachelor's degree in Engineering/Technology in a relevant discipline (from any Institute other than IITs) or MCA or MSc in a relevant discipline with CPI of 8 or 75% with valid CS GATE score with first class throughout, however, candidates with more than one undergraduate degree must have first class at least in qualifying undergraduate degree. (GATE Rank: Not more than 6000).</li> <li>iv) The other criteria will be same as general category criteria.</li> </ul>			
Women:	<ul> <li>i) 5 years age relaxation will be provided to Institute Fellows.</li> <li>ii) The other criteria will be same as general category criteria.</li> </ul>			
SC Category:	MCA or MSc in a relevant discipline with CPI of 8 or 75% with valid CS GATE score v	5 years age relaxation will be provided to institute fellows.  Candidate with bachelor's degree in Engineering/Technology in a relevant discipline (from any Institute other than IITs) or MCA or MSc in a relevant discipline with CPI of 8 or 75% with valid CS GATE score with first class throughout, however, candidates with more than one undergraduate degree must have first class at least in qualifying undergraduate degree. (GATE Rank: Not more than 6000).		
ST Category:	MCA or MSc in a relevant discipline with CPI of 8 or 75% with valid CS GATE score v	5 years age relaxation will be provided to institute fellows.  Candidate with bachelor's degree in Engineering/Technology in a relevant discipline (from any Institute other than IITs) or MCA or MSc in a relevant discipline with CPI of 8 or 75% with valid CS GATE score with first class throughout, however, candidates with more than one undergraduate degree must have first class at least in qualifying undergraduate degree. (GATE Rank: Not more than 6000).		
4. Shortlisting crite	a for the final selection for Admission			
	General, OBC, SC, ST, PD Category  Based on written and interview marks must obtain at least 60% of the combi	s only. The final selected candidates ined marks (i.e., marks of written test + te must obtain at least 30% marks in the		

5. **Selection Committee:** All the faculty members of Department of CSE

Signature of Members:						
Department PhD Coordinator	ŀ	Head of Department				
PIC, PG	A	Adean Academic				

Director