Indian Institute of Technology Palakkad
Electrical Engineering
Research Admissions - July 2019 Semester

The candidates shortlisted for tests/interviews in the four advertised areas are given below. Intimation emails have been sent on May 15, 2019. Tests/interviews will be held from June 11 to 13, 2019.

For two areas, there will be a written test prior to the interview. Read the information given till the end of the document carefully.

Area 1: Antennas, Microwave Engineering and Radar Systems

Shortlisting Criteria:

	Unreserved	OBC/GEN-EWS	SC/ST/PWD
MS	B.Tech ≥ 85% and GATE (EC) ≥ 790 or B.Tech from CFTI ≥ 80 %	B.Tech ≥ 80% and GATE (EC) ≥ 740 or B.Tech from CFTI ≥ 75 %	B.Tech ≥ 75% and GATE (EC) ≥ 690 or B.Tech from CFTI ≥ 70 %
PhD	M.Tech specialization in Microwave, Radar and allied areas[*] B.Tech ≥ 70% and M.Tech ≥ 75% or GATE (EC) ≥ 530 or Integrated M.Tech ≥ 72.5% or M.Tech from CFTI and score > 70%	M.Tech specialization in Microwave, Radar and allied areas[*] B.Tech ≥ 65% and M.Tech ≥ 70% or GATE (EC) ≥ 480 or Integrated M.Tech ≥ 67.5% or M.Tech from CFTI and score > 65%	M.Tech specialization in Microwave, Radar and allied areas[*] B.Tech ≥ 60% and M.Tech ≥ 65% or GATE (EC) ≥ 430 or Integrated M.Tech ≥ 62.5% or M.Tech from CFTI and score > 60%
	M.Tech specialization not in Microwave, Radar and allied areas[*]	M.Tech specialization not in Microwave, Radar and allied areas[*]	M.Tech specialization not in Microwave, Radar and allied areas[*]

	GATE ≥ 700	GATE ≥ 650	GATE ≥ 600

*Allied areas: Information and Communication Technology (System)/Wireless Network and Applications/Signal Processing/ Microwave and Television Engineering/Electronics and Communication Engineering

Shortlisted Candidates:

MS	PhD		
A19-EE3216	A19-EE2650	A19-EE2969	A19-EE4040
	A19-EE2703	A19-EE3039	A19-EE4084
	A19-EE2734	A19-EE3176	A19-EE4128
	A19-EE2756	A19-EE3203	A19-EE4146
	A19-EE2848	A19-EE3210	A19-EE4249
	A19-EE2860	A19-EE3357	A19-EE4271
	A19-EE2867	A19-EE3423	A19-EE4302
	A19-EE2873	A19-EE3637	A19-EE4444
	A19-EE2881	A19-EE3788	A19-EE4538
	A19-EE2903	A19-EE3958	A19-EE4584

Selection Procedure: Written test and interview.

The shortlisted candidates for the written test are given above; those who clear the written test will be interviewed.

The reporting time is 9:00 am, June 11, 2019. The written test will be held in the forenoon session of June 11, 2019. If the candidate clears the written test, he/she will be asked to appear for the interview. The interviews will be held on June 11 and 12, 2019. Hence, please be prepared to stay for two days.

Syllabus of Written Test:

Electromagnetics - Time varying fields and Maxwell's equations, Plane electromagnetic waves in free space, Reflection and transmission of an interface, Rectangular Waveguides, Transmission lines and Antennas.

Resources

[1] Pozar, D.M.: 'Microwave engineering' (John Wiley & Sons, 1998, 2nd edn.)

[2] Collins, R.E.: 'Foundations for microwave engineering' (Wiley-IEEE Press, 1984, 2nd edn.)

[3] R. Garg, P. Bhartia, I. Bahl, and A. Iittipiboon, Microstrip Antenna Design Handbook. Boston, MA: Artech House, 2001.

Area 2: Biomedical Signal Processing and Imaging

Shortlisting Criteria:

	Unreserved	**OBC/GEN-EWS**	**SC/ST/PWD**
MS	Valid GATE Score ≥ 580 and BTech score ≥ 85% or UG from CFTI with score ≥ 85%	Valid GATE Score ≥ 530 and BTech score ≥ 80% or UG from CFTI with score ≥ 80%	Valid GATE Score ≥ 480 and BTech score ≥ 75% or UG from CFTI with score ≥ 75%
PhD	Postgraduate degree with score ≥ 80% and GATE score ≥ 800 or IIT Palakkad staff with postgraduate degree from CFTI with score ≥ 80%	Postgraduate degree with score ≥ 75% and GATE score ≥ 750 or IIT Palakkad staff with postgraduate degree from CFTI with score ≥75%	Postgraduate degree with score ≥ 70% and GATE score ≥ 700 or IIT Palakkad staff with postgraduate degree from CFTI with score ≥ 70%

Shortlisted Candidates:

MS	**PhD**
A19-EE3768 A19-EE4591 A19-EE4151	A19-EE3048

Selection Procedure: Only interview and no written test.

The shortlisted candidates for interview are given above. The interview will be held on June 12, 2019 and the reporting time to the institute is 9:00 am.

Area 3: Communication and Signal Processing

Shortlisting Criteria:

	Unreserved	**OBC/GEN-EWS**	**SC/ST/PWD**
MS	Valid GATE score ≥ 550	Valid GATE score ≥ 500	Valid GATE score ≥ 450
PhD	Postgraduate degree from CFTI with score ≥ 83% or With PG degree and GATE score ≥ 540 or [for Direct PhD] Valid GATE score ≥ 600	Postgraduate degree from CFTI with score ≥ 78% or With PG degree and GATE score ≥ 490 or [for Direct PhD] Valid GATE score ≥ 550	Postgraduate degree from CFTI with score ≥ 73% or With PG degree and GATE score ≥ 440 or [for Direct PhD] Valid GATE score ≥ 500

Shortlisted Candidates:

MS	PhD	
A19-EE2623	A19-EE2654	A19-EE4249
A19-EE3006	A19-EE2873	A19-EE4260
A19-EE3216	A19-EE2875	A19-EE4271
A19-EE3337	A19-EE2963	A19-EE4404
A19-EE3535	A19-EE3039	A19-EE4414
A19-EE3768	A19-EE3394	A19-EE4507
A19-EE3817	A19-EE3461	A19-EE4599
A19-EE4130	A19-EE3571	
A19-EE4367	A19-EE3839	
A19-EE4591	A19-EE4084	

Selection Procedure: Only interview and no written test.

The shortlisted candidates for interview are given above. The reporting time is 9:00 am, June 12, 2019 as the interviews will be held on June 12 and 13, 2019. Candidates should be prepared to stay for these two days.

Area 4: Nanoelectronics, Plasmonics and Semiconductor Devices

Shortlisting Criteria:

	Unreserved	OBC/GEN-EWS	SC/ST/PWD
MS	with valid GATE score ≥ 475 or with valid GATE score, and UG score ≥ 85% or UG from CFTI with score ≥ 80%	with valid GATE score ≥ 425 or with valid GATE score, and UG score ≥ 80% or UG from CFTI with score ≥ 75%	with valid GATE score ≥ 375 or with valid GATE score, and UG score ≥ 75% or UG from CFTI with score ≥ 70%
PhD	with PG degree, and GATE score ≥ 500 or with UG score ≥ 70%, and PG (ME/MTech) score ≥ 80% or with valid GATE score, and UG score ≥ 75%, and MSc score ≥ 75% or Integrated Masters with score ≥ 75% or [for Direct PhD] UG from CFTI with score ≥ 80%	with PG degree, and GATE score ≥ 450 or with UG score ≥ 65%, and PG (ME/MTech) score ≥ 75% or with valid GATE score, and UG score ≥ 70%, and MSc score ≥ 70% or Integrated Masters with score ≥ 70% or [for Direct PhD] UG from CFTI with score ≥ 75%	with PG degree, and GATE score ≥ 400 or with UG score ≥ 60%, and PG (ME/Mtech) score ≥ 70% or with valid GATE score, and UG score ≥ 65%, and MSc score ≥ 65% or Integrated Masters with score ≥ 65% or [for Direct PhD] UG from CFTI with score ≥ 70%

Shortlisted Candidates:

MS		PhD				
A19-EE2744	A19-EE3748	A19-EE2611	A19-EE3118	A19-EE3504	A19-EE3921	A19-EE4351
A19-EE2747	A19-EE3792	A19-EE2681	A19-EE3193	A19-EE3534	A19-EE3965	A19-EE4356
A19-EE2762	A19-EE3800	A19-EE2685	A19-EE3233	A19-EE3541	A19-EE4028	A19-EE4358
A19-EE2811	A19-EE3863	A19-EE2719	A19-EE3273	A19-EE3607	A19-EE4033	A19-EE4359
A19-EE3230	A19-EE3910	A19-EE2732	A19-EE3353	A19-EE3631	A19-EE4062	A19-EE4372
A19-EE3287	A19-EE3928	A19-EE2753	A19-EE3364	A19-EE3652	A19-EE4088	A19-EE4384
A19-EE3308	A19-EE3976	A19-EE2805	A19-EE3391	A19-EE3684	A19-EE4119	A19-EE4386
A19-EE3407	A19-EE4027	A19-EE2817	A19-EE3405	A19-EE3763	A19-EE4146	A19-EE4388
A19-EE3481	A19-EE4094	A19-EE2818	A19-EE3406	A19-EE3840	A19-EE4186	A19-EE4417
A19-EE3535	A19-EE4117	A19-EE2848	A19-EE3420	A19-EE3842	A19-EE4207	A19-EE4510
A19-EE3537	A19-EE4130	A19-EE2875	A19-EE3443	A19-EE3855	A19-EE4242	A19-EE4521
A19-EE3667	A19-EE4151	A19-EE3031	A19-EE3462	A19-EE3873	A19-EE4263	A19-EE4578
A19-EE3693	A19-EE4438	A19-EE3094	A19-EE3464	A19-EE3912	A19-EE4279	A19-EE4597
A19-EE3703	A19-EE4469	A19-EE3104	A19-EE3483	A19-EE3920	A19-EE4313	A19-EE4614

Selection Procedure: Written test and interview.

The shortlisted candidates for the written test are given above; those who clear the written test will be interviewed.

The reporting time is 9:00 am, June 11, 2019. The written test will be held in the forenoon session of June 11, 2019. If the candidate clears the written test, he/she will be asked to appear for the interview. The interviews will be held on June 11 and 12, 2019. Hence, please be prepared to stay for two days.

Syllabus of written-test and interview:

Solid-state devices – Energy band formation, Concept of holes, Density of states and Fermi level; equilibrium carrier concentration, intrinsic and extrinsic semiconductors, Recombination and generation of carriers, carrier transport: drift and diffusion, Equations of state, Continuity and Poisson equation; excess carriers, injection level, carrier lifetime; energy band-diagrams, p-n junctions: equilibrium condition, contact potential, forward and reverse bias, I-V characteristics; bipolar junction transistors: physics and I-V characteristics; metal-oxide-semiconductor devices: MOS capacitor, MOSFET: physics and I-V characteristics; Schottky junctions.

Resources:

[1] B. G. Streetman and S. Banerjee, "Solid State Electronic Devices," Pearson Education India; Seventh edition (2015).

[2] S. Karmalkar, "Solid state devices," NPTEL video lectures: http://nptel.ac.in/courses/117106091/.

Instructions and Information:

1. Test/Interview dates: 11 - 13 June, 2019. Check the intimation email for more details.
2. It is mandatory that the candidates confirm their attendance via email latest by 8-June-2019 (ee-admissions@iitpkd.ac.in)
3. Last date for contacting department if there are any discrepancies: 25-May-2019 (ee-admissions@iitpkd.ac.in)
4. Institute has limited hostel facility (only cots and no beddings) on campus, which will be allotted on first-request first-serve basis. If you want to avail the hostel facility, please send an email to hostelmanager@iitpkd.ac.in with your Application Number, Name, Check-in and Check-Out time.
5. The accommodation is available only to the candidate, and only for the period of test/interview.

List of Things to Carry for Test/Interview:

1. A printout of the Application Summary page from the portal
2. A valid Photo Identity Card
3. Class 10 and 12: Original mark sheets and pass certificates
4. Undergraduate and postgraduate degree: Original certificates and original mark lists
5. National Level Tests mentioned in your application: Original Scorecards (GATE)
6. Other Ph.D. Fellowships mentioned in your application: Award Letters
7. A recent colour passport-sized photograph
8. An updated resume
9. Candidates who have not paid the application fee: A DD for Rs. 100/- drawn in favour of "IIT Palakkad", payable at Palakkad, when they come for the test/interview.