

Department of Electronics

Departmental Profile

(2017-2022)

1. Scope and Importance of department.

The Department is conducting courses B.Sc. in Electronics. The aim of this program is to provide the necessary theoretical background and practical experience in order to meet the requirements of the R&D Organizations and Industries. The curriculum of these courses keeps it in consonance with the changing industrial environment. A full range of resources and facilities are available to the students. The department has a well equipped computer laboratory with various circuit design software for students. In addition, there are well equipped laboratories for experimental work in the following areas Communication Electronics, Circuit Design, Microprocessors and Microcontroller.

2. Introduction of Department

Department of electronics is established in 1985. Initially this department was run under Physics Department. The first Head of the Department was appointed in 1994. The Department has well established Laboratory, Departmental Library and having periodicals.

3. Year of establishment : UG 1985

4. Details of Programmes / Courses offered (UG/PG/PhD/Certificate Course/Diploma course) (Academic Year 2022-23)

| Name of Programme | Duration | Entry Qualification | Medium of Instruction |
|--------------------|-------------|---------------------|-----------------------|
| B.Sc.(Electronics) | Three Years | Plus Two | English |

5. Program pattern (Semester / annual/ CBCS): B.Sc.-CBCS

6. Number of teaching and non-teaching staff: Teaching: 02 Non-Teaching: 03

7. Number of Teaching in the department:

| Designation | Sanctioned | Filled |
|---------------------|------------|--------|
| Professor | 01 | 00 |
| Associate Professor | 03 | 00 |
| Assistant Professor | 03 | 02 |

8. Faculty profile with name, qualification, designation, specialization, (Ph.D. / M. Phil. etc.,)

| Sr. No. | Name of faculty | Qualification | Year of appointment | Designation | Specialization | Number of years of teaching experience (Year and months) |
|---------|-----------------|---------------|---------------------|---------------------|----------------|--|
| 1. | Mr.A.S.Biraris | M.Sc.NET | 2009 | Assistant Professor | Electronics | 13Years |
| 2. | Mr.P.A.Morey | M.Sc. SET | 2009 | Assistant Professor | Electronics | 13 Years |

9. List of senior visiting faculty: Nil

10. Ongoing /completed research projects by faculty funded by governmental and non-governmental agencies (Last five years)

| Sr. No | Name of the principal investigator | Duration of the project | Name of the research project | Amount of fund received | Name of funding agency | Year of sanction | Dept. of recipient |
|--------|------------------------------------|-------------------------|------------------------------|-------------------------|------------------------|------------------|--------------------|
| | Nil | | | | | | |

11. Research papers published in journals notified on UGC website (Last five years)

| Sr. No. | Name of Journal | Title of Research Paper | ISSN/ ISBN No. | Whether peer reviewed. Impact Factor, if any |
|---------|-----------------|-------------------------|----------------|--|
| | Nil | | | |

12. Research papers published in National/International Conference-proceedings

| Sr. No. | Name of the Conference Seminar | Title of Research Paper | ISSN/ ISBN | Place & Date |
|-----------|--------------------------------|-------------------------|------------|--------------|
| 02 | | | | |

13. Number of books and chapter in edited volumes/Books published

| Sr.No. | Title of the book/chapter published | National/ International | Year of publication | ISBN/ISSN No. | Name of the publisher |
|-----------|-------------------------------------|-------------------------|---------------------|---------------|-----------------------|
| 03 | | | | | |

14. Name of Research Guides:

| Sr. No. | Name of research guide | Ph. D/ M. Phil |
|-----------|------------------------|----------------|
| 1. | Nil | |

15. Number of Ph. D/ M. Phil awarded by faculty:

| Sr.No. | Name of Ph. D/M. Phil scholar | Name of the Guide/s | Title of the thesis | Year of registration of scholar | Year of awards of Ph. D/ M. Phil. |
|--------|-------------------------------|---------------------|---------------------|---------------------------------|-----------------------------------|
| 1 | Nil | | | | |

16. Faculty as chairman/members in National committees/International Committees/ Editorial Boards/BOS/University committees etc.

| Sr. No. | Name of faculty | Name of the body in which full time teacher participated | Member of editorial board | Reviewer |
|---------|-----------------------|--|---------------------------|----------|
| 1. | Amit Sahebrao Biraris | Chairman, F.Y.B.Sc. University paper setter committee | | |
| 2 | Amit Sahebrao Biraris | Member T.Y.B.Sc. University paper setter committee | | |
| 3. | P. A. Morey | Member S.Y.B.Sc. University paper setter committee | | |
| 4. | Amit Sahebrao Biraris | Member , Parish Parsh Yojana | | |

17. Awards / Recognitions received by faculty:

| Year of awards | Name of full time teachers receiving awards from state level, National level, International level | PAN | Designation | Name of the award, fellowship, received from government or recognized bodies |
|----------------|---|-----|-------------|--|
| Nil | | | | |

18. Numbers of awards / Medals for outstanding performance in sports/cultural activities in National/ International/ State level etc. received by students

| Year | Name of the award/Medal | National/International/State etc. | Sports/Cultural | Aadhar/Student ID No. | Name of the Student |
|------|-------------------------|-----------------------------------|-----------------|-----------------------|---------------------|
| | Nil | | | | |

19. Students Qualifying in State/National/International level examination (NET, SET, GATE, GMAT, GRE, TOEFL/UPSC/MPSC/State government examination, etc.)

| Year | Registration No./Roll for the examination | Number of students selected | | | | | | | | | |
|------|---|-----------------------------|-----|------|------|-----|-----|-------|----------------|--------------------|--------------|
| | | SET | NET | GATE | GMAT | CAT | RGE | TOFEL | Civil services | State Examinations | Govt. Others |
| | N.A | | | | | | | | | | |

20. Student progression to higher studies. UG to PG, PG to M. Phil., PG to Ph. D, M. Phil to Ph. D, Ph. D to post-Doctoral, etc. (Last Batch, 2016-17)

1. UG to PG

| Year | Sr. No. | Program Graduated From | Department Graduated from | Student Name | Name of the Institute Joined | Name of the Program admitted |
|-----------|---------|--------------------------|----------------------------------|---------------------------|---|------------------------------|
| 2021-2022 | Nil | | | | | |
| 2020-2021 | 1 | B.Sc. Electronics | S.S.V.P.S Science College, Dhule | Abhishek Sanjay Chaudhari | School of Physical Science, KBC NM University Jalgaon | M.Sc. Electronics |
| | 2 | B.Sc. Electronics | S.S.V.P.S Science College, Dhule | BhushanDesale | School of Physical Science, KBC NM University Jalgaon | M.Sc. Electronics |
| | 3 | B.Sc. Electronics | S.S.V.P.S Science College, Dhule | RushukeshGopal Jade | MGSM College , Chopada | M.Sc. Electronics |
| | 4 | B.Sc. Electronics | S.S.V.P.S Science College, Dhule | PremrajRajendraPatil | MGSM College , Chopada | M.Sc. Electronics |
| | 5 | B.Sc. Electronics | S.S.V.P.S Science College, Dhule | ShubhamDeshmukh | MGSM College , Chopada | M.Sc. Electronics |
| 2019-2020 | NIL | | | | | |
| 2018-2019 | Nil | | | | | |
| 2017-2018 | Nil | | | | | |

2. PG to Ph. D or M. Phil to Ph. D.

| Sr. No. | Program Graduated From | Department Graduated from | Student Name | Name of the Institute Joined | Name of the Program admitted |
|---------|------------------------|---------------------------|--------------|------------------------------|------------------------------|
| 1. | N.A | | | | |

22. Placement of outgoing students (Last five years, 2017-2022)

| Year | Contact detail | Number of students placed | Name of the employer with contact details | Package received | Program graduated from |
|-----------|----------------|---------------------------|---|------------------|---|
| 2020-2021 | Not Available | 1 | PatilKalpesh Sunil Indian Army | 3.6 Lacks | S.S.V.P.S.L.K.Dr.P.R.Ghogrey Science College, Dhule |
| 2018-2019 | Not Available | 01 | BhullarGurjeet Singh Kabul Singh | 13.56 Lacks | S.S.V.P.S.L.K.Dr.P.R.Ghogrey Science College, Dhule |

| | | | | | |
|--|--|--|------------------|--|--|
| | | | Indian Air Force | | |
|--|--|--|------------------|--|--|

23. List of alumni/contribution

| Sr. No. | Name of Alumni | Year of Graduation/Post Graduation | Position held | Contact detail (Email, Mobile No.) | Quantum of Contribution |
|---------|----------------|------------------------------------|---------------|------------------------------------|-------------------------|
| | Nil | | | | |

24. List of eminent academicians and scientists / visitors to the department: Nil

25. Seminars/ Conferences/Workshops organized & the source of funding

| Sr. No. | Level National/ International/ State | Name of the workshop/Seminar conference | Funding agency | Amount sanctioned | Durations (From-To) | Number of participants |
|---------|--------------------------------------|---|----------------|-------------------|---------------------|------------------------|
| 1 | Nil | | | | | |

26. Student profile programme/course wise:

| Year | Name of the Course/programme (refer question no. 4) | Applications received | Enrolled | | Total number of Students |
|------------------|---|-----------------------|----------|----|--------------------------|
| | | | *M | *F | |
| 2021-2022 | B.Sc. | 7 | 6 | 1 | 7 |
| 2020-2021 | B.Sc. | 8 | 4 | 2 | 8 |
| 2019-2020 | B.Sc. | 3 | 1 | 2 | 3 |
| 2018-2019 | B.Sc. | 6 | 4 | 2 | 6 |
| 2017-2018 | B.Sc. | 3 | 1 | 2 | 3 |

27. Number of linkages for faculty exchange/student exchange/training/internship/field trips/job on training/research etc.

| Sr. No. | Title of the linkage | Name of the partnering institution/ industry /research lab with | Year of commencement | Duration (From-To) | Nature of linkage |
|---------|----------------------|---|----------------------|--------------------|-------------------|
| 1 | Nil | | | | |

28. Number of functional MoU's with corporate houses/ industries/other institutes/Universities, etc.

| Organisation with which MoU is signed | Name of the institution/ industry/ corporate house | Year of signing MoU | Duration | List the actual activities under each MoU year wise | Number of students/teachers participated under MoUs |
|---------------------------------------|--|---------------------|----------|---|---|
| Nil | | | | | |

24. Details of Infrastructural facilities

1. Internet facilities for Staff & Students- Yes
2. Class rooms with ICT facility- Yes
3. Laboratories-LAB -2

25. List of Equipment's/Instruments

| Sr. No | Name of equipment | Qty | Rate | Total Amt | Vat/ Tax 12.50% | Net Amt. |
|--------|---|-----|-------|-----------|-----------------|----------|
| 1 | Function Generator Systronics 1012 | 3 | 10330 | 30990 | 3873.75 | 34863.75 |
| 2 | Aplab 25 MHz (2 Ch 4 trace) 3802 | 1 | 26000 | 26000 | 1040 | 27040 |
| 3 | Sanva Y X 360 TrjMultimeter Analogue | 3 | 1150 | 3450 | 3369.38 | 30324.38 |
| 4 | Four Probe Apparatus PISCO | 1 | 19680 | 19680 | | |
| 5 | Spare Germanium Sample | 3 | 1275 | 3825 | | |
| 6 | Meco G-9 A Digital Multimeter | 6 | 1575 | 9450 | 27206.25 | 24356.25 |
| 7 | Rheostat 1.75"×14" 1.8A 110 ohms | 5 | 750 | 3750 | | |
| 8 | Registance Box 1-500 ohms Maganion Coil | 5 | 1690 | 8450 | | |

| | | | | | | |
|--------------|--|-----------|---------------|---------------|-----------------|------------------|
| 9 | Function Generator 20 MHz with 100 Khz Aux Gen. Sys. | 1 | 39900 | 39900 | 4987.50 | 44887.50 |
| Total | | 28 | 102350 | 145495 | 40476.88 | 161471.88 |

| <i>Sr.No</i> | <i>Name of the instrument</i> | <i>Specification</i> | <i>Quantity</i> | <i>Year</i> |
|--------------|------------------------------------|----------------------|-----------------|-------------|
| 1 | C.R.O (Dual Trace) PM-3206 | | 01 | 1986-1987 |
| 2 | RF Signal Generator 20729 | | 01 | 1986 |
| 3 | Dual Power Supply APLAB 7611 986/1 | | 01 | 1986 |
| 4 | Multimeter (Digital) type 43TT 108 | | 01 | 1986 |
| 5 | IC Tester (Digital) type 910 | | 01 | 1986 |
| 6 | Frequency Counter (10 MHz) | | 01 | 1986 |
| 7 | Power Supply 614/D | | 01 | 1986 |
| 8 | Function Generator Type 1014 | | 01 | 1886 |
| 9 | C.R.O (Dual Trace) 20MHz | | 01 | 1986 |
| 10 | CRO 520 | | 01 | 1986 |
| 11 | CRO sweep delay | | 01 | 1986 |
| 12 | Simpson Multimeter 260-6M | | 01 | 1987-88 |
| 11 | Carrying case for MM | | 01 | 1987 |
| 12 | CRO dual 15MHz | 138/80-81 | 01 | 1994-95 |
| 13 | CRO dual 15MHz | 47-85/86 | 01 | 1994 |
| 14 | CRO dual 15MHz | 60-86/87 | 01 | 1994 |
| 15 | CRO dual 15MHz | 84-87/88 | 01 | 1994 |
| 16 | CRO dual 15MHz | 111-88/89 | 01 | 1994 |
| 17 | P/S Aplab | V-318(138) 81/82 | 01 | 1994 |
| 18 | Solid state DC P/S | 68/87-88 | 01 | 1994 |
| 19 | P/S 3Amp 0-30V | 133-I/89-90 | 01 | 1994 |
| 20 | P/S 0-30V 2Amp APLAB | 160-I/90-91 | 01 | 1994 |
| 21 | P/S 0-30V (Network) | 39/84-85 | 01 | 1994 |
| 22 | P/S (RADART) | 92/87-88 | 01 | 1994 |
| 23 | Dual P/S twin transistor | 81/87-88 | 01 | 1994 |
| 24 | Simpson Multimeter | 67/87-88 | 01 | 1994 |

| | | | | |
|----|----------------------------------|--------------------|----|-----------|
| 25 | Multimeter (MECO) | 132(I)89-90 | 01 | 1994 |
| 26 | Hall Effect Kit | 85/87-88 | 01 | 1994 |
| 27 | Four probe res Setup | 86/87-88 | 01 | 1994 |
| 28 | Radio Reciever | 90/87-88 | 01 | 1994 |
| 29 | AFO (Sine Squate Wave) | V-308/79-80 | 01 | 1994 |
| 30 | AFO Sine square wave | V-319/81-82 | 01 | 1994 |
| 31 | AFO Sine square wave | V-320(I) 81-82 | 01 | 1994 |
| 32 | AFO Sine square wave | 32(I) 84-85 | 01 | 1994 |
| 33 | Signal Generator | 140(I) 89/90 | 01 | 1994 |
| 34 | AFO Systronics | 141-89/90 | 01 | 1994 |
| 35 | RC Oscillator | 40-84/85 | 01 | 1994 |
| 36 | DFM | 77/87-88 | 01 | 1994 |
| 37 | Frequency Counter | 52/86-87 | 01 | 1994 |
| 38 | Function Generator | 82/87-88 | 01 | 1994 |
| 39 | Function Generator | 139(II) 89-90 | 01 | 1994 |
| 40 | Function Generator 1012 | | 01 | 1994 |
| 41 | Function Generator | | 01 | 1995-96 |
| 42 | Frequency Counter | | 01 | 1995 |
| 43 | Digital Multimeter (Meco) | V/PH/EL/492/2 8 | 01 | 1995 |
| 44 | Power Supply | 404/95-96 | 01 | 1995 |
| 45 | Germanium Crystal Sample | | 01 | 1996-1997 |
| 46 | Hall Effect Kit | | 01 | 1996 |
| 47 | Spare Hall probe | | 01 | 1996 |
| 48 | DC Voltmeter 0-6 V (MO-65) | V257 | 02 | 1997-98 |
| 49 | Dc milliammeter (0-25mA) | V257 | 02 | 1997 |
| 50 | Dc milliammeter (0-100mA) | V257 | 02 | 1997 |
| 51 | Dc milliammeter (0-150mA) | V257 | 02 | 1997 |
| 52 | DC micro Ammeter (0-100 micro A) | V257 | 02 | 1997 |
| 53 | DC micro Ammeter (0-500 micro A) | V257 | 01 | 1997 |
| 54 | Resistence Box (5000 ohm) | V305 | 02 | 1997 |
| 54 | Resistence Box (5000 ohm) | V305 | 02 | 1997 |
| 55 | Rheostat 3.316 ohm | V305 | 02 | 1997 |
| 56 | Digital Multimeter (9A) | V313 | 02 | 1997 |
| 57 | Digital Multimeter (9A) (MECO) | V146 | 02 | 1998-99 |

| | | | | |
|----|---|-------------|----|----------------|
| 58 | Function Generator(4453/4455) | 991782 | 02 | 1998 |
| 59 | Power Supply (Twin Trans. 0-30V) | 991958 | 02 | 1998 |
| 60 | Rheostat | 992184 | 01 | 1998 |
| 61 | Digital Multimeter (Systronics Type-435) | 51311 | 01 | 2004-05 |
| 62 | Power Sypply (Dual Chan 0-30 V) Systronics 615D | 51311 | 02 | 2004 |
| 63 | CRO (25MHz Dual Systronics Type-526 | 51311 | 02 | 2004 |
| 64 | Function Gen Type 3002 Sys 2MHz | 51311 | 02 | 2004 |
| 65 | Digital Inverter | 110705086-B | 01 | 2005-06 |
| 66 | Inverter Battery | | 01 | 2005 |
| 67 | AnologMultimeterSanva | | 03 | 2006-07 CPE |
| 68 | Four Probe App (PISCO) | | 01 | 2006 |
| 69 | Spare Germanium Sample | | 03 | 2006 |
| 70 | Function Generator (Model-1016)20MHz | | 01 | 2006 |
| 71 | Digital Multimeter (MECO) | | 06 | 2006 |
| 72 | Rheostat 110ohm | | 05 | 2006 |
| 73 | Resistance Box 1-5000 ohm | | 05 | 2006 |
| 74 | Function Generator Sys 1012 | | 03 | 2006 |
| 75 | CRO Aplab 25MHz | | 01 | 2006 |
| 76 | Canon Laser Printer | | 01 | 2008-09 |

25. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

26.

| Sr. No. | Enrichment programmes | Experts |
|---------|-----------------------|---------|
| | Nil | |

26. Teaching methods adopted to improve student learning

1. Use of Portable Visualizer Document Camera(AverVision CP135) for teaching and Demonstrations.
2. Use of LCD Projector (PowerPoint Presentation, Video Lecture).
3. Use of PSpice and VHDL Simulators for T.Y.B.Sc Particles.
4. Use of Simulator Software, 8085 Micro ASM and 8051 SimulatorforS.Y.B.Sc and T.Y.B.Sc Particles

27. Participation in Institutional Social Responsibility (ISR) and Extension activities:

28. Future plans:

1. To arrange a workshop on maintenance and repairing of Electronics Instruments.

2. Linkage with nearby industries.

3. To Organize a lecture on Microcontroller and Automation

4. Collaboration with Industry.

5. To start M.Sc.(Electronics)

1. Retired Faculty profile with name, qualification, designation, specialization, (Ph.D. / M. Phil. etc.,)

| Sr. No. | Name of faculty | Qualification | Year of appointment | Designation | Specialization | Number of years of teaching experience (Year and months) |
|----------------|------------------------|----------------------|----------------------------|---------------------|-----------------------|---|
| 1. | Mr.A.S.Pawar | M.Sc. | | Associate Professor | Electronics | 28 Years 10 Months |
| 2. | Mr.P.B.Bhadane | M.Sc. | | Associate Professor | Physics | 33 Years 20days |