



Assistant Professor (Electronics Department)

Name	Mr. Prashant Vasantrya Kasambe
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Examination	Board/University	Year
Ph.D. Electronics	Mumbai	2014
M.E.(Electronics)	Mumbai	2005-2007
B.E. (Electronics & Telecommunication)	Amravati	July 1997
12 th	Amravati	March 1993
10 th	Nagpur	March 1991

Elective Subjects for B.E.

- 1) Medical Electronics

Elective Subjects for M.E.

- 1) Power Electronics
- 2) Electronics in Medicine
- 3) Digital System Design
- 4) Advanced Communication Theory

Project Information for B.E.

Title	Duration	Details
Project Report On Data Transmission Through Modem	6 months VIII – SEM	The goal was to achieve data transmission between two computers by developing a MODEM circuit. RS-232 standard of communication was used.

Project Information for M.E.

Title	Duration	Details
Call Admission Control Scheme using Genetic Algorithms For Next Generation Wireless Systems	12 months III & IV - SEM	Next Generation Wireless System will provide a variety of services to mobile users including high speed data, real-time applications and real-time multimedia support with a certain quality of service (QoS) level. The GAC scheme uses genetic algorithms to achieve high network utilization, minimum cost, minimum handoff latency and mobile terminal's (MT) QoS requirements.

Area of interest

- 1) Biomedical Instrumentation
- 2) Process Control and Instrumentation
- 3) Image Processing
- 4) Optimization Algorithms
- 5) MEMS Sensor Design

Courses/Workshop Attended

- 1) One Week Course on “Digital Image Processing and its Applications” organized by M S Ramaiah School of Advanced Studies, Bangalore, during 24th Nov to 29th Nov 2003.
- 2) Two Weeks Refresher Course on “Modern Perspective in Communication and Interpersonal Skills” approved by Director of Technical Education, Mumbai, during 9th June to 21st June 2003.
- 3) Two Days Workshop on “Computer Hardware” organized by Department of Electronics Engineering, Andheri (W), Mumbai-58, during 17th Nov & 18th Nov 2003.
- 4) Two Days Course on “Mechatronics” organized by Department of Electronics Engineering, FR. C.R. College of Engg., Bandra (W), Mumbai-50, on 4th Feb & 5th Feb 2005.
- 5) Two Days workshop on “Advances In Processor Architecture” organized by Department of Electronics Engineering, S. B. M. Polytechnic, Vile-Parle (W), Mumbai-56, on 17th March 2007.

- 6) One Day workshop on “Circuit Simulation” organized by Department of Electronics Engineering, Sardar Patel Institute of Technology, Andheri (W), Mumbai-58, on 28th Aug 2008.
- 7) Two Days CEP Course on “Introduction to Robotics” conducted by IIT Bombay, during 23rd -24th April 2010 at IIT Bombay.
- 8) Two Days workshop on “DSP Design Flow” organized by CoreEL Technologies & Department of Electronics Engineering, Sardar Patel Institute of Technology, Andheri (W), Mumbai-58, on 6th & 7th Jan 2011.
- 9) Two Days CEP Course on “Introduction to Robotics” conducted by IIT Bombay, during 14th – 15th Jul 2011 at Rajiv Gandhi College of Engg, Andheri, Mumbai.
- 10) Two Days Workshop on “Technical Paper Writing” conducted by Department of Electronics Engineering, Sardar Patel Institute of Technology, Andheri (W), Mumbai-58, on 21st & 22nd Jul 2011.
- 11) Two Days Workshop on “Analog System Design-Educators’ Workshop” conducted by Texas Instruments, Tech Park, Bangalore under India University Programme during on 27th & 28th January 2013.
- 12) Short Term Course on VLSI Design (STCVD-II, 2013) conducted by Department of Electronics and Telecommunication Department, MANIT, Bhopal, M.P. under TEQIP-II 26th Dec to 28th Dec 2013.
- 13) “Short Term Fast Track course on Verilog & Basic System Verilog Assertions” conducted by Department of Electronics and Instrumentation Department, Shri. G. S. Institute of Technology and Science, Indore, M.P. from 1st Feb to 12th Feb 2014.
- 14) Participated in “Engineering and Science Innovation Summit” sponsored by AI Instruments Pvt. Ltd., Mumbai in association with National Instruments on 21st August 2014.
- 15) Two days Hands-on workshop on “Embedded System Design Flow using Vivado” conducted by CoreEL Technologies (I) Pvt. Ltd. And Electronics Engineering Department, V.J.T.I., Mumbai, from 10th and 11th December 2014.
- 16) Two days workshop (under Faculty Development Programme) on “Challenges on VLSI Design” conducted by Electronics Engineering Department, Fr. Agnel College of Engineering, Bandra (West), Mumbai from 13th March 2015 to 14th March 2015.

- 17) One Day Tutorial on “Wavelet Theory” conducted by International Conference on Communication, Information and Computing Technology (ICCICT -2015), Sardar Patel Institute of Technology, Andheri (W), Mumbai-58, on 15th Jan 2015.
- 18) One Day MEMS Conference on MEMS Design to Manufacturing jointly organized by FTD Infocom Pvt. Ltd. and Coventor inc. on 15th Feb 2017 at Bangalore, India.

<i>ISTE-STTP/ TEQIP Sponsored Courses Attended</i>

- 1) Two Weeks ISTE-STTP on “DSP and its Applications” organized by Department of Electrical and Electronics Engineering, Sardar Patel College of Engg., Andheri(W),Mumbai-58, during 9th May to 20th May 2005.
- 2) Two Weeks ISTE-STTP on “Signal Processing and Communication Engineering” organized by Department of Electronics Engineering, D. J. Sanghavi College of Engg., Vile-Parle (W),Mumbai-56, during 10th Dec to 20th Dec 2007.
- 3) Two Weeks ISTE-STTP on “Mastering Matlab” organized by Department of Electronics Engineering, Datta Meghe College of Engg.,Airoli, Navi-Mumbai, during 1st Jan to 10th Jan 2008.
- 4) Two Weeks ISTE-STTP on “Software Tools in Electronics and Telecommunication Engineering” organized by Department of Electronics and Telecommunication Engineering, Rajiv Gandhi College of Engg, Andheri, Mumbai, during 15th Dec to 19th Dec 2008.
- 5) One Week ISTE approved Mission10X Workshop organized by WIPRO, conducted at Sardar Patel Institute of Technology, Andheri(W), Mumbai-58, during 24th Nov to 26th Nov 2008 & 9th Dec to 10th Dec 2008.
- 6) Two Weeks Graded ISTE-STTP on “Computer Communication Networks with Lab Exercises” organized by Sardar Patel Institute of Technology, Andheri (W), Mumbai, during 21st November to 2nd December 2011.
- 7) Two Weeks ISTE Workshop on “Introduction to Research Methodologies” conducted by Indian Institute of Technology, Bombay, from 25th June to 04th July 2012.
- 8) One Week Short Term Training Programme TEQIP –II Sponsored on “Fundamentals and Applications of Wireless Communication” conducted by Department of Electronics and Telecommunication Department, Shri. G. S.

Institute of Technology and Science, Indore, M.P. from 27th Jan to 31st Jan 2014
2014.

- 9) One Week STTP ISTE approved on “Micro-Electro-Mechanical-Systems (MEMS)” conducted by Ramdeobaba College of Engineering and Management, Nagpur, from 20th April to 25th April 2015.
- 10) One Week INUP (A project by DeitY, MCIT, Govt. of India at IIT Bombay and IISc, Bangalore) Hands-on Training Workshop on “Fabrication of MEMS Devices, conducted by CEN, IIT, Bombay, from 11th April to 15th April 2015.
- 11) Two Weeks AICTE Funded Faculty Development Program on “Electronic System Design: From Devices to Applications” conducted by Sardar Patel Institute of Technology, Andheri, Mumbai, from 4th May to 15th May 2015.
- 12) One Week STTP under GIAN (Global Initiative of Academic Network) (MHRD) on “MEMS Resonators-Fundamentals and Applications” conducted by Indian Institute of Technology, Mumbai, from 27th June 2016 to 3rd July 2016.
- 13) One Semester Course on “Bio Sensors and Bio MEMS (EE-625)” (PG Level Part time Programme) conducted by Department of Electrical Engineering, Indian Institute of Technology, Mumbai under Continuing Education and Quality Improvement Programme, during January-April 2016.
- 14) Two Weeks ISTE-STTP under National Mission on Education through ICT (MHRD) on “CMOS, Mixed Signal and Radio Frequency VLSI Design” conducted by Indian Institute of Technology, Khargpur, (Remote centre: Sardar Patel Institute of Technology, Andheri, Mumbai), from 26th December 2016 to 4th Feb 2017.

<i>Workshop/Courses Conducted</i>
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- 1) Conducted One Day Workshop on “LabVIEW” for IEEE student’s branch S.P.I.T., July 2007.
- 2) Conducted One Day Workshop on “LabVIEW” for IEEE student’s branch S.P.I.T., 15th Aug 2008.
- 3) Conducted One Day Workshop on “LabVIEW” for student of Electrical Engineering Dept. S.P.C.E. in 2008.

- 4) Member of the organizing committee for One Day workshop on “Circuit Simulation” organized by Department of Electronics Engineering, Sardar Patel Institute of Technology, Andheri (W), Mumbai-58, on 28th Aug 2008.
- 5) Member of the organizing committee for Two Days workshop on “Design with 8051 Microcontroller (Mechatronics)” organized by Department of Mechanical engineering Dept, S.P.C.E. & Electronics Engineering Dept, S.P.I.T., Andheri (W), Mumbai-58, on 19th – 20th Mar 2010.
- 6) Conducted Two Days Workshop on “PLC Programming” for students of S.P.C.E. & S.P.I.T. on 24th- 27th March, 1st -2nd April & 14th -17th April 2010.
- 7) Seminar conducted on “Input Output Modules and Special Purpose Modules for PLC” for B.E. Electrical students on behalf of EESA on 7th April 2010.
- 8) Conducted Two Days Workshop on “PLC Programming” for students of S.P.C.E. & S.P.I.T. on 1st & 8th Oct 2011.
- 9) Seminar conducted on “CRO, DSO (Electronics Tools)” for First year students of S.P.I.T. on behalf of IETE-SPIT on 29th Sept 2011.
- 10) Conducted Two Days Workshop on “PLC Programming” for students of S.P.C.E. & S.P.I.T. on 28th & 29th Oct 2013.
- 11) Conducted Two Day Workshop on “of Labview Programming” for students of Electrical Engineering Department, S.P.C.E on 18th & 19th Dec 2015 under TEQIP Programme.

<i>Books Published/Reviewed</i>
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- 1) Reviewed a Script on “Electrical Measurements”, McGraw Hill Education (India) Pvt. Ltd. in year 2008-09.
- 2) Reviewed a Script on “Control Systems”, Pearson Education, published by Dorling Kindersley (India) Pvt. Ltd. in year 2010-11.

<i>Papers Published/Presented</i>
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At National Conferences:

- 1) Kasambe, P. V., Kolekar, U. D., “Genetic Algorithms for Wireless Communication,” Proceedings of National Conference NCETCI-2007, Thadomal Shahani Engineering College, Mumbai, India, pp. 152-157, October 2007.

- 2) Kasambe, P. V., Daingade, Sangeeta, Rathod, S. S. Kolekar, U. D., "Optimizing the Performance of Control System using Genetic Algorithms," Proceedings of National Conference NCETCI-2007, Thadomal Shahani Engineering College, Mumbai, India, pp. 125-129, October 2007.
- 3) Karan S. Shah , Samiksha R. Gupta , Gauri M. Dalvi , Surendra S. Rathod , Prashant V. Kasambe, "Simulative study of a novel MEMS Cantilever design using CoventorWare," Proceedings of the National Conference NCATE2K16, Datta Meghe College of Engineering, Airoli, Navi Mumbai, March 2016.
- 4) S. S. Rathod, P. V. Kasambe, Prachi Gharpure, "Measuring the Effectiveness of Collaborative Learning through Technical Competitions ", in the Proceedings of 1st National Conference on Innovations in Engineering and Management Education (NCIEME-16), jointly organized by Walchand College of Engineering Sangali and Rajarambapu Institute of Technology, Sakharale, Dec 2016.

At International Conferences:

- 1) Kasambe, P. V., Rathod, S. S., Kolekar, U. D., "Validation of Multi-Manchester Receiver Using Co-Simulation Environment of Simulink in Matlab and HDL," Proceedings of International Conference, RSPS-2008, KLCE, Andhra Pradesh, India, pp. 302-307, February 2008.
- 2) Kasambe, P. V., Rathod, S. S., "Validation of Multi-Manchester Receiver Using Co-Simulation Environment of Simulink in Matlab and HDL," Proceedings of International Conference on VLSI Design and Embedded Systems (ICVLSI'08), VEC, Tamil Nadu, India, pp. 90-96, February 2008.
- 3) Desai, F. S., Bhat, R. R., Shah, H. N., Rathod, S. S., Kasambe. P. V., "FPGA Based Implementation of Color Image Processing Techniques," Proceedings of SPIT-IEEE Colloquium and International Conference Mumbai, India, Vol. 2, pp. 59-62, Feb 2008.
- 4) Kasambe, P. V., Patel, Mohsin, "Modified Fractal Image Compression Technique Using Genetic Algorithms," Proceedings of SPIT-IEEE Colloquium and International Conference Mumbai, India, Vol. 1, pp. 134-139, Feb 2008.
- 5) Kasambe, P. V., Sutar, R. G., Ambawade, D. D., "Real Time Heart Rate Variability Analysis Using Virtual Instrumentation," Proceedings of the

International Conference, ICCCI-2008, VESIT, Mumbai, India, pp. 423-425, Jan 2009.

- 6) Kasambe, P. V., Mehta, K. P., Malnika, J. A., Kothari, J. A., Shah, P. H., Rathod, S. S., "Development of Uniform Framework for Simulation, Data Acquisition and Analysis of Electronic Devices and Circuits across Various Electronics Engineering Laboratories," Proceedings of the IETE 43rd Mid Term Symposium (IETE New Delhi & Pune Centre), Pune, pp. 99-103, April 2012.
- 7) Acharya, S., Kabra, H., Kasambe, P. V., Rathod, S. S., "Performance Evaluation of an Integer Haar Wavelet Transform for FPGA Implementation," Proceedings of the International Conference ICNTE 2015, Fr. Agnel COE, Vashi, Navi Mumbai, Jan 2015. (available online 978-1-4799-7263-0/15 ©2015 IEEE Explore)
- 8) Kasambe, P. V., Rathod, S. S., "VLSI Wavelet Based Denoising of PPG Signal", Proceedings of Procedia Computer Science 49 (2015), International Conference ICAC3'15, Fr. Agnel COE, Bandra, Mumbai, pp. 282-288, Apr 2015.

At International Journals:

- 1) Naik, Sanskruti, Rai, Rini, Sankhe, Nimisha, Kasambe, P. V., "Automatic Anterior Chamber Angle Assessment of Ultrasound Images For Glaucoma Detection," Proceedings of the International Journal of Engineering Research & Technology (ISSN: 2278-0181) Vol. 2 Issue 4, April-2013.
- 2) Pooja, A. B., Nupur, D. K., Prashant, V. K., "Analyzing Performance of VHDL-AMS for Switch Level Modeling and Simulation," Proceedings of the the International Journal of Scientific Engineering & Technology (ISSN: 2277-1581), Vol. 2 Issue 5, May-2013.
- 3) Badnikar, S. A., Vengurlekar, A., Kasambe, P., "Electrical Performance Optimization of MOSFETs Using Multiobjective Genetic Algorithms," Proceedings of the International Journal of Latest Trends in Engineering & Technology (ISSN: 2278-621X), Vol. 2 Issue 2, March-2013.
- 4) Pal, A., Kasambe, P. V., "Performance Evaluation of Evolutionary Algorithms for Digital Filter Design," Proceedings of the International Journal of Scientific Engineering and Technology (ISSN: 2277-1581), Vol. 2 Issue 5, pp. 398-403, May 2013.
- 5) Karan S. Shah , Samiksha R. Gupta , Gauri M. Dalvi , Surendra S. Rathod , Prashant V. Kasambe, "Performance Analysis Of MEMS Microheater By

Optimizing Coil Design Using Coventorware,” Proceedings of the International Journal of Journal of Research in Engineering and Applied Sciences (JREAS), Vol. 1, Issue 03, pp. 135-140, July 2016.

- 6) Sumit B. Jadhav, S. S. Rathod, P. V. Kasambe, “Data Driven Control Topology for Industrial Process using PLC,” Proceedings of the International Journal of Innovative and Emerging Research in Engineering, Vol. 3, Special Issue 1, ICSTSD 2016, pp. 601-605, May 2016.
- 7) Tushar Mohan Shingade, Reena Sonkusare, S. S. Rathod, P. V. Kasambe, “Design and Development of Flow Control System using LabVIEW,” Proceedings of the Satellite Conference ICSTSD 2016 International Conference on Science and Technology for Sustainable Development, Kuala Lumpur, MALAYSIA, May 24-26, 2016 (available online Proceedings of the International Journal of Innovative and Emerging Research in Engineering (ISSN: 2348 – 8549), Vol. 3, Special Issue 1, ICSTSD 2016, pp. 601-605, May 2016).