**Supplementary File**

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| **Table 1.**SOME OF THE MAJOR UNIVERSITIES IN INDIA OFFERING DIFFERENT BIOINFORMATICS COURSES |
| **Sr.No** | **Universities** | **Website** | **Level of Degree** |
| 1 | University of Calcutta | <http://www.caluniv.ac.in> | Diploma/MS |
| 2 | Manipal Univarsity | <https://manipal.edu/mu.html> | MS |
| 3 | MATS School of Biological and Chemical Sciences | <http://www.matsuniversity.ac.in/index.php> | M.Sc. |
| 4 | Royal School of Management and Technology | <http://www.royalschool.ac.in/> | B.Sc./M.Sc. |
| 5 | Bhausaheb Deshpande College of Biotechnology and Bioinformatics | <http://bdcbtjalna.online/> | B.Sc. |
| 6 | CMJ University | <http://cmju.net.in/> | Diploma/B.Sc./M.Sc. |
| 7 | SMS College of Life Sciences | <http://www.smslife.in/index.php> | M.Sc. |
| 8 | Valliammal College for Women, Chennai | <http://www.valliammal.edu.in/> | M.Sc. |
| 9 | Holy Cross College, Tiruchirappalli | <http://www.hcctrichy.ac.in/> | B.Sc./PhD |
| 10 | Periyar University | <https://www.periyaruniversity.ac.in/> | B.Sc./M.Sc./PhD |
| 11 | Malankara Catholic College, Kanyakumari | <http://www.malankara.edu.in/> | B.Sc. |
| 12 | Our College of Applied Sciences, Kanpur | <http://www.ourcollege.in/common/index.html> | B.Sc. |
| 13 | Kerala University of Fisheries and Ocean Studies | <https://www.kufos.ac.in/> | B.Sc. |
| 14 | Bishop Heber College, Tiruchirappalli | <http://bhc.edu.in/> | M.Sc. |
| 15 | Indra Gandhi College of Arts and Science | <http://igcas.org/> | M.Sc. |
| 16 | Nirmala College for Women | <http://www.nirmalacollegeonline.ac.in/nirmala_college_coimbatore.php> | M.Sc. |
| 17 | Dr. Babasaheb Ambedkar Marathwada University | <http://www.bamu.ac.in/> | B.Sc./M.Sc. |
| 18 | Bharathiar University | <http://www.b-u.ac.in/> | M.Phil./ PhD |
| 19 | Danyanasadhana Asian Institute of Core Competence | <http://www.htcampus.com/college/dnyanasadhana-asian-institute-core-competence/> | M.Sc. |
| 20 | Himalayan University | <https://www.himalayanuniversity.com/> | M.Sc. |
| 21 | Dilbrugarh University | <https://www.dibru.ac.in/> | M.Sc./PhD |
| 22 | Saint Wilferd’s Postgraduate College | <http://www.stwilfreds.com> | M.Sc. |
| 23 | Guru Nanak Girls College, Ludhiana | <http://gngcldh.com/> | B.Sc.(Hons.) |
| 24 | IIS University | <https://iisuniv.ac.in/> | M.Sc. |
| 25 | Avinashilingam Institute for Home Science and Higher Education for Women | <http://avinuty.ac.in/maincampus/> | M.Sc./M.Phil. |
| 26 | Stella Maris College, Chennai | <http://stellamariscollege.edu.in/> | M.Sc. |
| 27 | GGDSD College, Chandigarh | <http://ggdsd.ac.in/> | B.Sc.(Hons.)/M.Phill |
| 28 | BBK DAV College for Women | <http://www.bbkdav.org/> | PhD |
| 29 | DAV College, Chandigarh | <https://davchd.ac.in/> | B.Sc./M.Sc. |
| 30 | Chaudhary Charan Singh Haryana Agricultural University | <http://hau.ac.in/index.php> | M.Sc. |
| 31 | Sophia College for Women, Mumbai | <http://sophiacollegemumbai.com/> | Diploma |
| 32 | Ayya Nadar Janaki Ammal College | <https://www.anjaconline.org/> | Diploma |
| 33 | Thanthai Hans Roever College of Arts and Science | <http://www.roevercollege.ac.in/> | PG Diploma |
| 34 | Sri Ramachandra University College of Biomedical Sciences, Chennai | <https://www.sriramachandra.edu.in/university/> | M.Sc. |
| 35 | Osmania University College for Women | <http://www.oucwkoti.ac.in/> | PG Diploma |
| 36 | Prof. G Ram Reddy Centre for Distance Education | <http://www.oucde.net/> | PG Diploma |
| 37 | Dr. Gosh Institute of Technology and Management | <http://www.dgitm.com/> | M.Sc. |
| 38 | KS Rangasamy College of Arts and Science | <http://ksrcas.edu/> | PG Diploma |
| 39 | IFTM University | <https://www.iftmuniversity.ac.in/> | MS |
| 40 | Devi Ahilya Vishwavidyalaya University | <http://www.dauniv.ac.in/> | M.Sc. |
| 41 | Dr. GR Damodaran College of Science, Coimbatore | <http://www.grd.org/grdcs/> | PG Diploma/ M.Sc. |
| 42 | Meenakshi Ramasamy Arts and Science College, Perambalur | <http://www.mrcolleges.net/> | PG Diploma |
| 43 | Prof. Dhanapalan College for Women, Kelambakkam | <http://www.dhanapalancollege.com/> | M.Sc. |
| 44 | Bharathidasan College of Arts and Science, Erode | <http://www.bharathidasancollege-erode.in/> | B.Sc./M.Sc. |
| 45 | Sri Krishna Arts and Science College, Coimbatore | <http://skasc.ac.in/> | M.Sc. |
| 46 | Annai College of Arts and Science, Thanjavur | <http://annaicollege.com/> | M.Sc. |
| 47 | Indian Institute of Chemical Technology (IICT), Hyderabad | <http://www.iictindia.org/> | PG Diploma |
| 48 | JSS University: Faculty of Life Sciences, Mysore | <https://www.jssuni.edu.in/JSSWeb/WebShowFromDB.aspx?MID=0&CID=7&PID=10002> | M.Sc. |
| 49 | College of Applied Education and Health Sciences, Meerut | <http://www.caehs.edu.in/> | M.Sc. |
| 50 | Kurukshetra University | <http://www.kuk.ac.in/> | B.Sc. |
| 51 | Jacob School of Biotechnology and Bio-Engineering, SHIATS, Allahabad | <http://shuats.edu.in/> | B.Sc. |
| 52 | GITAM Institute of Science: School of Life Sciences, Vishakapatnam | <http://vspgis.gitam.edu/admissions/Schooloflifesciences> | B.Sc./ M.Sc. |
| 53 | International Institute of Information Technology: School of Biotechnology, Pune | <http://www.isquareit.edu.in/> | PG Diploma |
| 54 | Apeejay Svran Institute for Biosciences and Clinical Research, Gurgaon | <http://www.apeejay.edu/aibcr/> | PG Diploma |
| 55 | Bioinformatics Institute of India (BII), Noida | <http://www.bii.in/> | PG Diploma |
| 56 | Center for Bioinformatics Research Institute, Chennai | <https://www.bicpu.edu.in/about-bioinformatics-centre> | M.Sc./PhD |
| 57 | Singhania University, Jhunjhunu | <http://singhaniauniversity.co.in/> | B.Tech/MS/PhD |
| 58 | Integral University, Lucknow | <http://iul.ac.in/> | M.Sc. |
| 59 | Savitribai Phule Pune University : Bioinformatics Centre, Pune | <http://www.unipune.ac.in/> | M.Sc./ PhD |
| 60 | Jamia Millia Islamia, New Delhi | <https://www.jmi.ac.in/> | B.Sc./ M.Sc. |
| 61 | University of Hyderabad, Hyderabad | <http://www.uohyd.ac.in/> | M.Tech |
| 62 | University of Calcutta, Kolkata | <http://www.caluniv.ac.in> | PG Diploma/ M.Sc. |
| 63 | Institute of Bioinformatics and Applied Biotechnology, Bangalore | <http://ibab.ac.in/> | M.Sc./PhD |
| 64 | Pondicherry University: Bioinformatics Centre, Puducherry | <http://www.pondiuni.edu.in/> | MS/PhD |
| 65 | Assam University, Silchar | <http://www.aus.ac.in/> | PG Diploma |
| 66 | Punjab University, Chandigarh | <http://puchd.ac.in/> | BS |
| 67 | Mahatma Ghandi University, kerala | [https://www.mgu.ac.in](https://www.mgu.ac.in/) | B.Sc. |
| 68 | Guru Nanak Dev University, Punjab | [http://www.gndu.ac.in](http://www.gndu.ac.in/) | B.Sc. |
| 69 | Shivaji University, Maharashtra | [http://www.unishivaji.ac.in](http://www.unishivaji.ac.in/) | B.Sc./M.Sc. |
| 70 | Awadhesh Pratap Singh University, Madhya Pradesh | [http://apsurewa.ac.in](http://apsurewa.ac.in/) | B.Sc./M.Sc. |
| 71 | Sardar Patel University, Gujrat | [http://www.spuvvn.edu](http://www.spuvvn.edu/) | BS |
| 72 | IISER, Pune | [http://www.iiserpune.ac.in](http://www.iiserpune.ac.in/) | BS/MS |
| 73 | Institute of bioinformatics and applied biotechnology (IBAB) | [http://www.ibab.ac.in](http://www.ibab.ac.in/) | PG Diploma/PhD |
| 74 | Patna University, Patna | [http://www.biotechmku.org](http://www.biotechmku.org/) | PG Diploma |

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| **Table 2**.SOME OF THE PAKISTANI UNIVERSITIES OFFERING DIFFERENT COURSES AND DEGREES IN BIOINFORMATICS |
| **Sr.No** | **Universities** | **Website** | **Level of Degree** |
| 1 | Al-Khair University | [http://www.alkhair.edu.pk](http://www.alkhair.edu.pk/) | BS |
| 2 | Government College University, Faisalabad | [https://gcuf.edu.pk](https://gcuf.edu.pk/) | BS/MS |
| 3 | COMSATS Institute of Information Technology | [https://www.comsats.edu.pk](https://www.comsats.edu.pk/) | BS/MS |
| 4 | Islamic International University | [www.iiu.edu.pk](http://www.iiu.edu.pk/) | BS/MS |
| 5 | Quaid-e-Azam University | http://qau.edu.pk/ | BS/MS/PhD |
| 6 | Khushal Khan Khattak University | [www.kkkuk.edu.pk](http://www.kkkuk.edu.pk/) | BS |
| 7 | Virtual University of Pakistan | [www.vu.edu.pk](http://www.vu.edu.pk/) | BS/MS |
| 8 | Hazara University | [www.hu.edu.pk](http://www.hu.edu.pk/) | BS/MS/PhD |
| 9 | Shaheed Benazir Bhutto Women University | [www.sbbwu.edu.pk](http://www.sbbwu.edu.pk/) | BS/MS |
| 10 | Khwaja Fareed University of Engineering and Information Technology | [https://www.kfueit.edu.pk](https://www.kfueit.edu.pk/) | BS |
| 11 | University of Sialkot | uskt.edu.pk | BS |
| 12 | Capital University of Science and Technology | [https://cust.edu.pk](https://cust.edu.pk/) | BS/MS/PhD |
| 13 | Baqai Medical University | baqai.edu.pk | BS |
| 14 | Indus University | [www.indus.edu.pk](http://www.indus.edu.pk/) | BS |
| 15 | Institute of Business and Technology | [https://ibt.edu.pk](https://ibt.edu.pk/) | BS |
| 16 | Sir Sayed University of Engineering and Technology | ssuet.edu.pk | BS |
| 17 | Forman Christian University | [www.fccollege.edu.pk](http://www.fccollege.edu.pk/) | BS |
| 18 | Qarshi University | [www.qu.edu.pk](http://www.qu.edu.pk/) | BS |
| 19 | The Superior University | superior.edu.pk | BS |
| 20 | University of Management and Technology | [https://www.umt.edu.pk](https://www.umt.edu.pk/) | BS |
| 21 | Government Postgraduate College (Mandian) | gpgcm.edu.pk | BS |
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| 22 | Royal Group of Colleges (Gujranwala) | [www.theroyalgroup.education](http://www.theroyalgroup.education/) | BS |
| 23 | Gulab Devi Educational Complex | [https://gdec.edu.pk](https://gdec.edu.pk/) | BS |
| 24 | Federal Institute of Health Sciences | fihs.edu.pk | BS |
| 25 | The Limit Institution of Health Sciences | limit.edu.pk | BS |
| 26 | National University of Science and Technology | [www.nust.edu.pk](http://www.nust.edu.pk/) | MS |
| 27 | University of Sindh | [https://usindh.edu.pk](https://usindh.edu.pk/) | MS |
| 28 | CECOS-University of Information Technology and Emerging Sciences | [www.cecos.edu.pk](http://www.cecos.edu.pk/) | MS |
| 29 | Baluchistan University of Information Technology, Engineering and | [http://www.buitms.edu.pk](http://www.buitms.edu.pk/) | BS |
| Management Sciences, Quetta |
| 30 | Institute of Molecular Sciences & Bioinformatics, Lahore | [http://www.imsb.edu.pk](http://www.imsb.edu.pk/) | Research |
| 31 | Centre of Excellence in Molecular Biology, Lahore | [http://www.cemb.edu.pk](http://www.cemb.edu.pk/) | Research |
| 32 | Bahria University, Karachi | [http://www.bimcs.edu.pk](http://www.bimcs.edu.pk/) | Research |
| 33 | Al-Khawarizmi Institute of Computer Science (KICS), Lahore | [http://www.kics.edu.pk](http://www.kics.edu.pk/) | Research |
| 34 | Lahore University of Management Sciences, Lahore | [http://www.lums.edu.pk](http://www.lums.edu.pk/) | Research |
| 35 | Panjwani Center for Molecular Medicine and Drug Research, Karachi | [http://www.iccs.edu.pk](http://www.iccs.edu.pk/) | Research |

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| **Table 2.****UNIVERSITIES IN SRI-LANKA OFFERING BIOINFORMATICS DEGREE AND COURSES** |
| **Sr. No** | University | Website | Degree |
| **1** | The University of Colombo, School of Computer | <http://ucsc.cmb.ac.lk/> | Research |
| **2** | Eastern University, Sri-Lanka | [www.esn.ac.lk](http://www.esn.ac.lk) | B.s.c |
| **3** | IBMBB, University of Colombo | <http://www.ibmbb.cmb.ac.lk/> | MS |
| **4** | University Directory Worldwide | <https://www.university-directory.eu/index.html> | PhD |

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| **Table 3.**UNIVERSITIES IN SRI-LANKA OFFERING BIOINFORMATICS DEGREE AND COURSES |
| **Sr. No** | University | Website | Degree |
| 1 | The University of Colombo, School of Computer | <http://ucsc.cmb.ac.lk/> | Research |
| 2 | Eastern University, Sri-Lanka | [www.esn.ac.lk](http://www.esn.ac.lk) | B.s.c |
| 3 | IBMBB, University of Colombo | <http://www.ibmbb.cmb.ac.lk/> | MS |
| 4 | University Directory Worldwide | <https://www.university-directory.eu/index.html> | PhD |

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| **Table 4** Universities offering Bioinformatics Courses in Nepal and Bangladesh |
| **Sr. No** | Universities | Website | Degree |
| 1 | Center for Molecular Dynamics, Nepal | <http://www.cmdn.org.np/index.html> | Diploma |
| 2 | University of Kathmandu, Nepal | <http://www.ku.edu.np/> | BS/Diploma |
| 3 | Asian University for Women, Bangladesh | <http://www.auw.edu.bd/> | BS |
| 4 | Bangladesh Bioinformatics and Computational Association, Bangladesh | <http://www.bbcba.org/> | Research |
| 5 | University of Development Authority, Bangladesh | <http://uoda.edu.bd/> | BS or B.s.c |

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| **Table 5** Major Conferences and Workshops of Bioinformatics held in South Asian Countries |
| Bioinformatics Conferences and Workshops Held in Pakistan |
| **Sr. No** | **Title** | **Organizer** | **Date** |
| 1 | International Workshop on Bioinformatics | COMSTECH and PTCL, Pakistan. | 22–25 April 2003 |
| 2 | Virtual Conference on Bioinformatics and Genomics | Dr. Panjwani Center for Molecular Medicine and Drug Research, Karachi. | 21–24 Sep 2004 |
| 3 | Workshop on Bioinformatics | Dr. Panjwani Center for Molecular Medicine and Drug Research, Karachi. | 4-Oct-04 |
| 4 | HEC sponsored Training Course for Researchers to Equip with Latest Bioinformatics Tools | Kohat University of Science and Technology, Kohat (NWFP), Pakistan. | 15–17 April 2005 |
| 5 | Pre 18TH FAOBMB Symposium Satellite Workshop on Bioinformatics | Center of Excellence in Molecular Biology, Lahore, Pakistan. | 14–19 Nov 2005 |
| 6 | Genetics, Bioinformatics, Biotechnology and Economic Development | Centre for Molecular Genetics, Genetics Department, Karachi University, Karachi, Pakistan. | 4–8 Dec 2005 |
| 7 | Use of Bioinformatics in Genomics Research | COMSTECH and COMSATS Institute of Information Technology | 19 Aug-2 Sep 2006 |
| 8 | National Workshop on Bioinformatics for Computer Scientists  | COMSTECH and COMSATS Institute of Information Technology | 21–25 May 2007 |
| 9 | A workshop on Bioinformatics | Centre for Molecular Genetics, at L.E.J. National Science Information Center, University of Karachi, Karachi, Pakistan | 28–30 June 2007 |
| 10 | 1st National Workshop for Computational Biology & Bioinformatics. | Bioinformatics Research Lab, Bahria University, Karachi. | 3–5 April 2009 |
| 11 | Bioinformatics: Opening up new frontiers in molecular biology research. | The University of Veterinary and Animal Sciences, Lahore. | 14–15 May 2010 |
| 12 | COMSTECH- SIUT workshop on Bioinformatics. | COMSTECH, Pakistan. | 16-18, Dec 2014 |
| 13 | Workshop on Advances in Bioinformatics in the Post Genomic Era. |  Quaid-e-Azam University, Islamabad. | 6th Nov 2014 |
| 14 | Bioinformatics Workshop Hands-on Training on Analysis of Biological Data using R. | Virtual University of Pakistan | 5-Jan-16 |
| 15 | Training workshop on Bioinformatics tools and resources | UVAS, Pakistan. | 29-30th March 2017 |
| 16 | International Workshop on Computational Biology in Biotechnology | NIBGE, Pakistan. | 31st July 2017 |
| Bioinformatics Conferences and Workshops Held in India |
| 1 | [Bioinformatics Center Workshop](http://bioinfo.ernet.in/) | Pune, India | Mar-97 |
| 2 | [Frontiers of Structural Biology and Bioinformatics](http://www.ncbs.res.in/) | Bangalore, India | August 25-28, 1999 |
| 3 | International Workshop on Algorithms | [Indian Statistical Institute, Kolkata, India.](http://www.isical.ac.in/) | Dec. 15-16, 2005 |
| 4 | [Discovery In Life Sciences: Structure-based Bioinformatics Approaches](http://bioinfo.net.in/workshop05/)  | Bioinformatics Centre  | 19 – 22 Dec 2005 |
| 5 | National Seminar-cum-Workshop on Bioinformatics | [Indian Institute of Science, Bangalore, India](http://www.iisc.ernet.in/) | 1-2 May 2006 |
| 6 | Fifth International Conference on Bioinformatics | New Delhi, India, | 18-20 Dec 2006. |
| 7 | Indian Conference on Bioinformatics 2017  | Birla Institute of Scientific Research | 7-9 Nov, 2017 |
| 8 | INSA-CAS Workshop on Structural Biology | [Indian Institute of Science, Bangalore, India,](http://www.iisc.ernet.in/) | 21-23 Dec 2007 |
| 9 | 2008 BIRC Workshop on Protein Structure and Function Prediction | Nanyang technology university | 25-Oct-08 |
| 10 | The Eight Asian Pacific Bioinformatics Conference | Bangalore, India | 18-20 Jan 2008 |
| 11 | Molecular Modeling, Protein-Protein Interactions, and Computer Aided-Drug Design | Centre of Bioinformatics, University of Allahabad, India | Mar-10 |
| 12 | Workshop on Proteins: Structure, Function, and Folding   | [Indian Institute of Science, Bangalore, India,](http://www.iisc.ernet.in/) | 20-24 Dec 2010 |
| 13 | Workshop on Networks: Structure and Function  | [Indian Institute of Science, India](http://www.iisc.ernet.in/) | 04-05 Nov 2011 |
| 14 | Workshop on Statistical analysis with R | Allahabad University, India | Sep-13 |
| 15 | Indian Conference on Bioinformatics 2017  | Birla Institute of Scientific Research | Nov 07, 2017 through Nov 09, 2017 |
| 16 | RGCB- WORKSHOP — Workshop on Programming for Biologists | Trivandrum, India | 23 Jul 2018 - 28 Jul 2018  |
| 17 | International Conference on Bioinformatics (InCoB) | New Delhi, India  | 26-Sep-18 |
| 18 | Nextgen Genomics, Biology, Bioinformatics and Technologies Conference | India | 30th Sep-2 Oct 2018 |
| 19 | International Conference on Bioinformatics and Systems Biology | Indian Institute of Information Technology-Allahabad | 26th to 28th October 2018 |
| 20 | Indian Conference on Bioinformatics | Jalandhar, India | 22-Feb-19 |
| Bioinformatics Conferences and Workshops Held in Bangladesh |
| 1 | Seminar on Bioinformatics: Prospects and Opportunities for Bangladesh | University of Dhaka | 5-Aug-08 |
| 2 | International Conference on Bioinformatics and Biostatistics for Agriculture, Health, and Environment | University of Rajshahi, Bangladesh | 20-23 Jan 2017 |
| 3 | Bioinformatics and Computational Biology  | BRRI & BARI, Gazipur  | 13-14, Dec,2017 |
| 4 | 7th National workshop on "Bioinformatics and Computational Biology"  | BARC, Dhaka  | 26-28, Dec 2017 |
| 5 | 8th National workshop on "Bioinformatics and Computational Biology"  | BMRC, Dhaka | 14-15 Jan 2018 |
| 6 | 9th National workshop on "Bioinformatics and Computational Biology" | SUST, Sylhet, | 4th week of Feb. 2018 |
| 7 | World Congress on Advancement in Bioinformatics and Drug Discovery | Dhaka Bangladesh | 5th Oct 2018 |
| Bioinformatics Conferences and Workshops Held in Sri Lanka |
| 1 | South Asian Biotechnology Conference 2018 - SABC 2018 | Colombo, Sri Lanka | 28 - 30 March 2018 |
| 2 | Workshop on Bioinformatics | University of Sri jayewardenepura | 1-3 June 2018 |
| 3 | [451st International Conference on Environment and Natural Science (ICENS)](https://www.allconferencealert.com/event_detail.php?ev_id=183272) | Colombo , Sri Lanka | 16 Sep, 2018 |
| Bioinformatics Conferences and Workshops Held in Nepal |
| 1 | [International Conference on Bioscience and Biotechnology (ICBB)](https://10times.com/icbb-ee) | [Kathmandu University](https://10times.com/venues/kathmandu-university) | 17-20 Feb, 2018 |
| 2 | 11th Triennial Conference of Association of Asia Pacific Operational Research Societies (APORS-2018) | Kathmandu, NEPAL | 6-9 Aug, 2018 |