

OVERVIEW OF ONLINE ADMISSION SYSTEMS FOR PROFESSIONAL PROGRAMMES

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Abstract: This survey article describes current offline Admission System & Online Admission System. How it will be beneficial to students / parents, University /Institution. Article list problems faced by current system & discusses advantages of online admission system. This paper explains system component diagram of online Admission & challenges to be faced by the system. As article considers professional programmes' Online Admission, it first defines what is Professional Programme & gives list of different academic programmes approved by UGC. It gives brief scenario of Online Admission System used by different Professional Programmes.

Keywords: Online Admission system, professional programme, course, academic programme, qualification.

1 INTRODUCTION

Admission of students into university is a most important activity in every educational system which is as old as education itself.

Student admissions are a vital part of any University's / Institution's running because students keep a

University/Institution alive and they cannot survive without students. As more & more students are enrolling in different Universities / Institutions, for different programmes.[1] It is becoming difficult to handle such a large volume of student's admission using offline admission system.

ICT is integrated into nearly every aspect, it is playing important role in Education field also. As we are moving towards digital age, students receive information about the college from internet. In the competitive world of college admission, students and colleges must stay one step ahead of the game. Colleges and Universities concentrate on attracting quality students to them, so they also have begun to rely on Web technology. Use of **Online Admission System** is one of them [2].

Online Admission System is defined as a service available and performed using the Internet where computer & other devices are connected with network to perform Admissions.

It will be useful to transform existing complex admission system into applicant/student-friendly, simpler, efficient, accurate, prompt and transparent system at affordable cost with high quality, greater speed and wider accessibility in a mass-personalized manner.[3]

Many Universities & colleges admission offices now operate in nearly paperless environments, creating tremendous operational efficiencies.[4] DTE(directorate of Technical Education) ,S.N.D.T. University , Pune University, Mumbai University, Garware College, F.C College etc. are few of them to name here.

2 Online Admission System

2.1 Process of current offline Admission System:

Webtech Software & Services Ltd is organization at Calcutta who develops Online Admission software, describes offline admission system. When University / College plans for admissions to its affiliated colleges, prints the forms & publish notice in newspapers informing dates for collection of forms / submission of forms. Then merit list is displayed, if any queries in list are handled & then final merit lists are displayed iteratively. According to merit admissions are given to the students in various colleges of universities according to rules & regulations established.[5]

2.2 Problems faced by current offline Admission System:

1. Printed Application Forms
2. Handle Queries & Distribute Forms
3. Collect Forms
4. Sort List of Candidates : [5]

2.3 Advantages of Online Admission System

There are following advantage of implementing online admission process for particular University/college.[6]

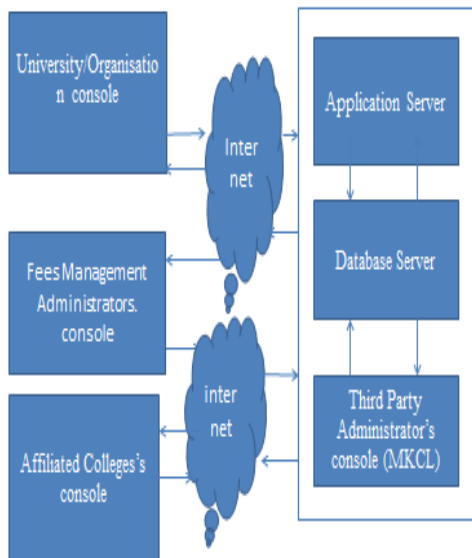
- 1) Significantly Reduces Paper Work

- 2) Geographically scattered students can Apply
- 3) Online Help to fill application Form
- 4) Online payment of application Form Fees
- 5) Repetitive Data Entry elimination & generation of computerized merit list with 100% Accuracy
- 6) No Xerox & Attestation of mark sheets Required
- 7) Online Communication of Merit list, waiting List within to administrative people & to candidates
- 8) Real-time reports & graphs can be generated
- 9) Malpractices Reduction

3 System Analysis

The following diagram shows how Online Admission System works

System Component Diagram Of Online Admission System showing System Developers(third party) & University/College Administration



Different Components description in above diagram is as follows

3.1 (University/Organisation eg. dte) Module should perform following functions

- 1 Maintains list of Affiliated colleges , departments program wise
- 2 Maintains Admission Rules & Regulations
- 3 Uploading & maintenance of News, Events, Circulars, Notices
- 4 Uploading & maintenance of Fees Details
- 5 Maintains Eligibility Details

- 6 Maintains Number of seats available in affiliated colleges program wise (Engineering / MBA etc)
- 7 Add/Delete affiliated colleges
- 8 Create New Program Broacher
- 9 Update Program Broacher

3.2 (Affiliated Colleges) Module should perform following functions

1. College can Register itself Online
2. 2 College can Upload
3. Photos of Infrastructure
4. Laboratory & Library Facilities
5. College Achievements & Awards
6. Industry Relationships
7. 3 University Module offers following services to colleges
8. Gives Login ID & password
9. Sends Various Notices , Instructions from university
10. Upload allocated candidate list in college Login

3.3 (Fees Management Administrator) Module should perform following functions

1. Collect Application Form fees from applicants through debit card/Credit card/ Online Banking
2. Confirm fees payments to respective students through email/ SMS

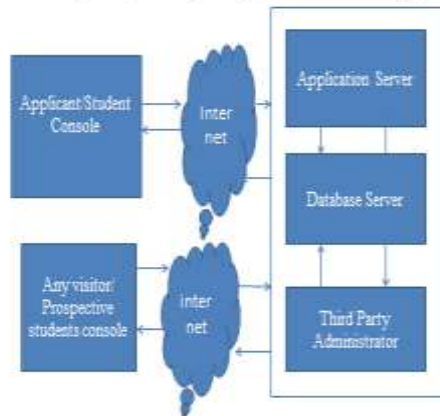
3.4 Functions performed by Database Server

1. Stores Online Application Form of applicants
2. Admit Card Generation
3. Result Declaration Of Entrance Exam
4. Sorting Applications according to marks.
5. Seat allocation to Different Colleges

3.5 Functions performed by Application Server

1. Provision of Online Help to fill Application Form
2. Generates Login information for all users
3. Does Analysis of data collected & can generates graphs from statistical data

System Component Diagram Of Online Admission System showing System Developers(third party) & Student/Applicant



3.6 (Applicant/Student) Module should perform following functions

1. Student/Applicant can Register Online
2. Pays Application Form fees Online / Entrance exam fees Online
3. Personalized Form filling facility
4. Fills online Application & submits
5. Gets confirmation of submission of Form & Fees
6. Student can update his/her information
7. Can Download Admit Card for Entrance Exam
8. Can get Entrance Exam Results
9. Apply for choices of colleges
10. Gets Admission confirmation
11. Can upload documents

3.7 (Any visitor/ Prospective students) Module should perform following functions

1. Visitor posts queries about Online Admission System
2. For FAQs (Frequently Asked Questions) answers are available on website
3. New questions are stored in database server & answers are given to them.

While developing above diagrams reference is taken of M.K.C.L. (Maharashtra Knowledge Corporation Limited) is leading organization in providing solutions for online application. MKCL's OASIS (Online Application Solutions and Integrated Services) is program used by many professional programmes.[7]

3.8 Challenges to be faced while developing Online admission System by organization developing software(third party)

1. Minimize the Cost of Entire Process of Admission system, Total Time Required, Human Involvement, Data Redundancy and Paperwork.
2. Maximize availability, transparency, accuracy, reliability, productivity of website.
3. Design a Dynamic Process so that queries can be handled fast & fast response
4. User Interface should be Interactive / Friendly.
5. Real Time Report Availability.
6. Skilled manpower requirement to handle all situations with ease.[5]

4 Overview Of Online Admissions for Professional Programmes

4.1 Definitions

As article considers professional programmes'Online Admission, let us define what is Professional Programme. According to UGC "Technical **and/or Professional Education**" means **programmes** of education, research and training in the areas namely engineering & technology, architecture, town planning, management, pharmacy, applied arts & crafts, hotel management and catering technology, computer applications, and such other programmes or areas as the Central Government may, in consultation with the Commission, by notification in the Official Gazette, declare.[8]

Thus a **professional programme** is a programme that leads to a professional qualification.[9]

Each word has a specific meaning as follows

According to oxford dictionary meaning A **profession** is a job requiring special training & a formal **qualification**.[10]

UGC defines "**Qualification**" as a degree or any other qualification awarded by a university.

A '**Programme**' generally ends with the award of a Certificate or Diploma or Degree.[11]

According to UGC an **academic programme** is defined in terms of a **set of courses** that are linked together in an academically cohesive manner. [8]

According to UGC regulations 2009 **programme** can be defined as higher education programme pursued for a degree specified by the commission(UGC) under section 22(3) of the UGC Act.[12]

"**Course**" means one of the units which comprises a Programme of study.[8]

"**Regulations**" means regulations made under UGC Act.

Under this Act University Grants Commission (UGC) with the approval of the Central Government **specifies the list of degrees** that can be awarded. [12] which are as follows

4.2 List Of Degrees For The Purposes Of Section 22 Of The University Grants Commission Act, 1956

Bachelor's Degree	Master's Degree
1. Bachelor of Arts (B.A.) (M.A.)	1. Master of Arts
2. Bachelor of Commerce (B.Com.)	2. Master of Commerce
3. Bachelor of Education (B.Ed.)	3. Master of Education (M.Ed.)
4. Bachelor of Training (B.T.)	4. Master of Oriental Learning (M.O.L.)
5. Bachelor of Oriental (B.O.L.) (M.L.)	5. Master of Laws Learning
6. Bachelor of Literature (LL.M.)	6. Master of Law or (B.Litt.) Laws
7. Bachelor of Law or Literature (M.Litt.)	7. Master of Letters Laws (B.L.) or Master of Literature (M.Litt.)
8. Bachelor of Law or Laws (LL.B.)	8. Master of Philosophy (M.Phil.)
9. Bachelor of Civil Law (B.C.L.)	9. Master of Indology (M.Ind.)
10. Bachelor of Music	10. Master of Social Work (B.Mus.) (M.S.W.)
Bachelor Degree	Master Degree
11. Bachelor of Science (B.Sc.)	11. Master of Business Administration (M.B.A.)
12. Bachelor of Technology (B.Tech.)	12. Master of Music (M.Mus.)
13. Bachelor of Textiles (B.Text.)	13. Master of Library Science (M.Lib.Sc.)
14. Bachelor of Architecture (B.Arch.)	14. Master of Science (M.Sc.)
15. Bachelor of Agriculture (B.Agr.)	15. Master of Technology (M.Tech.)
16. Bachelor of Mechanical Engineering (B.M.E.)	16. Master of Engineering (M.E.)
17. Bachelor of Electrical Engineering (B.E.E.)	17. Master of Electrical Engineering (M.E.E.)
18. Bachelor of Chemical Engineering (B.Ch.E.)	18. Master of Mechanical Engineering (M.E.E.)
19. Bachelor of TeleCom munication Engineering (M.Ch.E.)	19. Master of Chemical Engineering (B.Tel.E.)
20. Bachelor of Civil Engineering (B.C.E.)	20. Master of Textiles (M.Text)
21. Bachelor of Engineering (B.E.)	21. Master of Veterinary Science (M.V.Sc.)
22. Bachelor of Chemical Technology (B.Chem.Tech.)	22. Master of Planning (M.Plan.)
23. Bachelor of Veterinary	23. Master of Architecture

Science (B.V.Sc.)	(M.Arch.)
24. Bachelor of Veterinary Science & Animal Husbandry (B.V.Sc. & A.H.)	24. Master of Surgery (M.S.)
25. Bachelor of Dental Surgery (B.D.S.)	25. Master of Pharmacy (M.Pharm.)
26. Bachelor of Nursing (B.Nurs.)	26. Master of Obstetrics and Gynecology (M.O.)
Bachelor Degree	
27. Bachelor of Medicine & Bachelor of Surgery (M.B.B.S. or M.B. & B.S.)	
28. Bachelor of Pharmacy (B.Pharm.)	
29. Ayurvedacharya, Bachelor of Medicine & Surgery (A.M.B.S.)	
30. Bachelor of Medicine & Bachelor of Surgery (B.M.B.S.)	
31. Bachelor of Ayurvedic Medicine (B.A.M.)	
32. Bachelor of Ayurvedic Medicine and Surgery (B.A.M.)	
33. Bachelor of Ayurvedic Medicine and Surgery (B.A.M. & S.)	
34. Bachelor of Sanitary Science (B.S.Sc.)	
35. Bachelor of Indian Medicine (B.I.M.)	

Doctorate Degree

1. Doctorate of letters or Doctor of Literature (D.Litt. or Litt. D.)
2. Doctor of Philosophy (Ph.D. or D.Phil.)
3. Doctor of Oriental Learning (D.O.L.)
4. Doctor of Laws (LL.D.)
5. Doctor of Law (D.L.)
6. Doctor of Science (D.Sc. or Sc.D.)
7. Doctor of Medicine (M.D.)
8. Doctor of Hygiene (D.HV.)

Universities in India are recognized by the University Grants Commission (UGC), which draws its power from the *University Grants Commission Act, 1956*. [13]

Fifteen (15) Professional Councils are established by Act of Parliament and are under the Department of Higher Education in the Union Human Resource Development Ministry which controls different aspects of accreditation and coordination. They are also responsible for recognition of courses, promotion of professional institutions and providing grants to undergraduate programmes and various awards. These statutory professional councils

(**Statutory / Regulatory body** means a body so constituted by a Central / State Government Act for setting and maintaining standards in the relevant areas of higher education.) are:

1. All India Council of Technical Education (AICTE)
2. Medical Council of India (MCI)
3. Indian Council for Agricultural Research (ICAR)
4. National Council for Teacher Education (NCTE)
5. Dental Council of India (DCI)
6. Pharmacy Council of India (PCI)
7. Indian Nursing Council (INC)
8. Bar Council of India (BCI)
9. Central Council of Homeopathy (CCH)
10. Central Council for Indian Medicine (CCIM)
11. Council of Architecture
12. Distance Education Council (DEC)
13. Rehabilitation Council
14. National Council for Rural Institutes (NCRI)
15. State Councils of Higher Education (SCHE) [14]

“University” means a University established or incorporated by or under a Central Act, a

Provincial Act or a State Act, and includes any such institution as may, in consultation with the University concerned, be recognised by the Commission in accordance with the regulations made in this behalf under UGC Act.

The table below summarizes the professional council responsible for admissions , rules for different U.G/P.G programmes for which they are Statutory / Regulatory bodies

Sr. No	Professional Council	Professional Programme it governs
1	All India Council of Technical Education (AICTE)	Degree and Diploma Programs in Engineering and Technology, MCA & MBA, Pharmacy, Architecture & Applied Arts, Hotel Management & Catering Technology and M.E./M.Tech. / M.Pharm. /M.Arch.).
2	Medical Council of India (MCI)	M.B.B.S. /M.D./PG Courses in Medicine
3	Dental Council of India (DCI)	B.D.S./M.D.S./PG Courses
4	Central Council for Indian Medicine (CCIM)	B.A.M.S./B.S.M.S./B.U.M.S./Post graduate & Post Diploma courses in Aurved

5	Central Council of Homeopathy (CCH)	B.H.M.S. / M.D.(Homeopathy) & other courses
6	Indian Nursing Council (INC)	Auxiliary Nurse & Midwife/ B.Sc. (Nursing)/ M.Sc. (Nursing) etc.
7	Pharmacy Council of India (PCI)	D.Pharm/ B.Pharm
8	Indian Council for Agricultural Research (ICAR)	U.G./P.G. Programmes in Agriculture, Agricultural Engineering Fisheries, Home Science, Horticulture , Forestry, Veterinary Sciences & Animal Husbandry and Food Process Engineering. (like M.Sc.(Agriculture) M.Sc. (Horticulture) M.Sc.(Forestry) M.F.Sc. (Fisheries Science) M.Tech. (Food Technology) M.Sc. (Agricultural Bio-Technology) M.Tech.(Agricultural Engineering) M.Sc.(Home Science) M.B.A. (Agri.) M.Sc. (Post Harvest Management) B.Sc.(Agriculture) B.Sc.(Horticulture) B.Sc.(Forestry) B.F.Sc.(Fisheries Science) B.Tech.(Food Technology) B.Tech.(Agricultural Engineering) B.Sc.(Home Science) B.B.A. (Agriculture.)
9	Council of Architecture	B.Arch. / M. Arch.
10	National Council for Teacher Education (NCTE)	B.Ed./M.Ed.
11	Bar Council of India (BCI)	L.L.B./ L.L.M. / 5 year Integrated Law programme

12	Distance Education Council (DEC)	Programmes conducted in distance mode in which professional programmes are M.B.A. , M.C.A., B.Ed., M.Ed., Diploma / Degree Engineering etc
13	Rehabilitation Council	Post graduate
14	National Council for Rural Institutes (NCRI)	Post graduate diploma in rural development & various programmes for Gandhian basic education which based on agriculture, handicrafts etc
15	State Councils of Higher Education (SCHE) [7]	Prepare programmes in the various subjects in the sphere of higher education, keeping in view the overall priorities, perspective and needs of the society and expectations from higher education;

1	Four Year Full Time Degree course in Engineering / Technology (B.E. / B.Tech.)	National Level Joint Entrance Examination (JEE Main) or MT-CET (Maharashtra Technical Common Entrance Test)	DTE (Directorate of Technical Education)	2,85,112 Intake capacity = 154827	YES
2	Diploma in Engineering	10 th Exam	DTE (Directorate of Technical Education)	Intake capacity = 173802	YES
3	Post Graduate Degree in Engineering / Technology (M.E. / M.Tech.)		DTE (Directorate of Technical Education)	Intake capacity = 16714	YES
4	D.Pharm . (Diploma in Pharmac		DTE (Directorate of Technical Education)	Intake capacity = 12136	

The Above table summarizes professional councils & different U.G/P.G programmes for which they are Statutory / Regulatory bodies with reference to Maharashtra State

Now we will form a table showing professional programmes for which Online Admission is carried out & Exam to be qualified for Admissions to respective programmes. Table lists the professional programmes for which large number of students opt/ apply for.

Sr. No	Professional Programmes	Exam To be Qualified	Authority for Admission Process	Number of students applied for Programme 2013	Online Admission Process Yes/ No
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5	B.Pharm. (Bachelor Of Pharmacy)	MT-CET (Maharashtra Technical Commission Entrance Test)	DTE (Directorate of Technical Education)	Appearedf or MTCET with PCB= 135413 Intake capacity =9955	YES
6	M.Pharm. (Master of Pharmacy)		DTE (Directorate Of Technical Education)	2979	YES
7	B.Arch. (Bachelor of Architecture)	Maharashtra Architecture Commission Aptitude Test MAH-AR-CAT exam.	DTE (Directorate Of Technical Education)	5897 Intake capacity = 3647	YES
8	M.Arch. (Master of Architecture)	M.Arch-CET 2013 Commission Entrance Test	DTE (Directorate Of Technical Education)	Intake capacity =53	YES
9	M.B.B.S. / B.D.S. /B.A.M.	National level	DMER (Directorate of	Appeared for NEET UG	

	S. / B.H.M.S ./ B.U.M.S ./ B.P.Th. / B.O.Th./ B.A.S.L. P / B.Sc. Nursing & B.P.MT	UG NEET (National Eligibility Cum Entrance Test) Exam / At State level in Maharashtra MHT-CET exam	Medical Education & Research, Mumbai).	=96,546 Qualified =33964	
10	M.D. / M.S. / PG Programmes	P.G. NEET	DMER (Directorate of Medical Education & Research, Mumbai).	Appeared for NEET PG =4882	
11	MBA/M MS/PGD M/PGD BM	CMA T conducted by AICTE / CAT	DTE (Directorate of Technical Education)	83662 appeared for exam Intake = 45747	
12	MCA	MAH-MCA CET	DTE (Directorate of Technical	Appeared = 22,960	

			Education)		
13	BSc. Agri / B.Sc. Horticulture / B.Sc.(Forestry) B.F.Sc.(Fisheries Science) B.Tech.(Food Technology) B.Tech.(Agricultural Engineering) B.Sc.(Home Science) B.B.A. (Agriculture.)	12 th	Maharashtra Council Of Agricultural Education And Research, Pune	Intake capacity = 5743	
14	M.Sc.(Agriculture) M.Sc.(Horticulture) M.Sc.(Forestry) M.F.Sc.(Fisheries Science) M.Tech.(Food Technology) M.Sc.(Agricultural Biotechnology) M.Tech.(Agricultural Engineering) M.Sc.(Home Science) M.B.A. (Agri.) M.Sc.	MAUEB(Maharashtra Agricultural Universities Examination Board) Common Entrance Test.	Maharashtra Council Of Agricultural Education And Research, Pune	Intake capacity =757	

(Post Harvest Management)					
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Conclusion :

The above article gives scenario of Online Admission System used in listed professional programmes. As system is currently used widely by many Universities/ Institutions & Government Competent Authorities which are responsible for Admission Processes, researcher is interested in finding out processes used by above listed programmes & wants to evaluate how technology used in the various phases of admission process, and what are current challenges faced by colleges, universities & organizations responsible for admissions.

BIBLIOGRAPHY:

1. <http://www.studymode.com/essays/Online-Admission-Processing-System>
2. SUMMER 2005 JOURNAL OF COLLEGE ADMISSION Study By Denise Gifford, Juanita Briceño-Perriott and Frank Mianzo "Pen to Mouse: Web-Based Technology's Impact on College Admission Applications"
3. www.sndtdigitaluniversity.com
4. 2007 NACAC White Paper by the National Association for College Admission Counseling. Printed in the United States of America. "Technology in the College Admission Process: Impact on Process, Professionals and Institutions www.webtechsoftware.com
5. <http://fyjc.org.in/mumbai/StaticPages/HomePage.aspx> 11th Standard Online Admission, Mumbai Region Year 2013-2014 (developed by MKCL)
6. www.oasis.mkcl.com
7. <http://www.ugc.ac.in>
8. <http://answers.yahoo.com/question>
9. Oxford Dictionary
10. <http://www.sgbau.ac.in> (Sant Gadge Baba Amravati university website)
11. University Grant Commission Act 1956 As modified up to the 20th December 1985 and Rules and Regulations Under the Act printed in 2002
12. http://en.wikipedia.org/wiki/Central_University_India
13. <http://www.ugc.ac.in/page/professional-councils.aspx>
- 14.