PG Diploma in Broadcast Technology

A full time one year self financing programme
Approved by UGC – No. F. 5-3/200(CU) dt. 11.10.2004

Revised Syllabus: 9th Aug 2018

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("A" Grade Accredited by NAAC)
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A.J.K. Mass Communication Research Centre

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F No. Admn/AJK MCRC/2018/PGD BT

Date : 9th Aug 2018

Subject: Minutes of Meeting of the Expert Committee set up for designing curriculum of PG Diploma in Broadcast Technology programme

A meeting of Expert Committee, constituted by the Vice Chancellor, for designing the curriculum of PD Diploma in Broadcast Technology programme, was held on 9th August 2018 at 4:30 pm. The Director briefed the members about the course and about the vision and proposed changes to align the curriculum with the industry trends. The draft curriculum was circulated amongst members and their suggestions were incorporated. The following members attended the meeting.

1. Mr. George Kuruvilla, CMD Broadcast Engineering Consultants India Ltd.
2. Mr. I I George, ADG NIABM, Prasar Bharati, and President Broadcast Engineering Society (India)
3. Mr. Amitabh Kumar, Advisor Zee Network, Rep. Indian Broadcasting Foundation (IBF)
4. Mr. N Parmeshwaran, Sr Consultant, Ministry of HRD, Govt of India
5. Prof. Z A Jaffrey, Faculty of Engineering, JMI
6. Mr. Mateen Ahmad, Asst Prof AJK MCRC
7. Prof. M Kasim, AJK MCRC (Member Convenor)
8. Prof. Iftikhar Ahmad, Director AJK MCRC, Chairman

The following members could not attend the meeting due to their prior engagements, however they have given their suggestions and concurrence on the draft syllabus.

1. Mr. Ujwal Nirgudkar, Memeber Oscar Academy and Chairman SMPTE, India Section
2. Mr. Rajshekhran Harikrishnan, VP and CTO VIACOM18
3. Mr. Zaid Ahmad, Project Manger India & APAC Dalet, (Alumni)

As the course has already commenced and the revised curriculum is to be followed for the for academic session 2018-19, the Committee approved the draft syllabus. It was also unanimously decided by the Committee that the programme may be converted to a master's programme from next academic session for which details of syllabus, resources, collaboration with IBF, BES, BECIL, Prasar Bharati, Min of HRD and industry for necessary support may be worked out. The Committee also recommended that sponsored seats from industry may also be added to the programme for which necessary modalities may be worked out for approval of the Committee.

(Iftikhar Ahmed) (Amitabh Kumar) I.I. George Parameswaran N 9/8/18

(Prof M. Kasim) 9/8/18 (George Kuruvilla)

PG DIPLOMA IN BROADCAST TECHNOLOGY

1. Programme background:

The programme was started at AJK MCRC from academic session 2005-06 and it was approved by UGC as "PG Diploma in Broadcast System Maintenance". The first revision of the syllabus took place in 2010 when the title was amended to "PG Diploma in Broadcast Technology". Subsequently another major revision of the programme was carried out in 2014 when it was also aligned with semester system adopted by the University. This revision of the programme is to orient it with the evolving trends in media industry.

2. Programme introduction:

Media sector has seen exponential growth over the last few decades. The Indian Media and Entertainment Industry stood at INR 1.5 trillion (USD 22.7 billion) in 2017 and it is expected to reach at INR 2 trillion (USD 31 billion) by 2020. Television and Radio has contributed significantly towards this growth and are estimated to occupy over half of the M&E pie by 2020.

Digital technology evolution has been one of the main reasons of the growth. It has not only influenced traditional content creation and distribution practices but it has also redefined consumption behaviors and patterns. Traditional Broadcast operations are adopting IP and cloud to benefit from the ICT revolution. Non linear broadcasting, OTT and increasing digital media consumption, anytime, anywhere on any device, are reshaping the contours of media industry.

Developing qualified and skilled manpower that could understand and assimilate the new developments for dissemination of information, education and entertainment to the masses while optimizing resources and bringing operational efficiencies is one area the course aims to address.

3. Teaching methodology:

This course aims to train the students on basic aspects related to information communication processes and evolving broadcasting media technologies. The focus is on teaching theoretical concepts related to latest technologies and systems employed for content acquisition, production and transmission in radio and television with equal emphasis on skill development through hands on training, practical exercises and internship. The students are also exposed to latest issues and challenges confronting broadcasting media sector through participation in workshops, exhibitions and conferences.

4. Programme outcome:

On successful completion of the programme, the students are expected to develop good understanding of media creation and distribution processes, work flows in digital domain for linear and non linear broadcasting and digital cinema. They will also be critically evaluate the trends, opportunities and challenges related to digital broadcast media, infrastructure and its operational and maintenance aspects.

They are expected to assume operational and managerial roles with production houses, broadcasters, educational content providers, system integrators, sales and marketing, media institutions and in other related domains of media industry. They can also follow consultancy and entrepreneurial paths as per their interests.

5. Eligibility:

Bachelor's degree (10+2+3) in Physics/ Electronics/ Computer Science/ IT/ BCA or in Engineering with at least 50% marks in aggregate or equivalent. The candidate must have studied Physics and Mathematics at Sr. Secondary (10+2) level.

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SYLLABUS OF PG DIPLOMA IN BROADCAST TECHNOLOGY - 2018

1. Programme Structure:

S. No.	Name of the Programme	Post Graduate Diploma in Broadcast Technology
1	Duration	Two semesters - full time
2	Mode	Self-Financing
3	Credits required for completion of programme	Minimum 56 credits
4	Core Courses	48 credits
5	Elective Courses	Minimum 8 credits
6	Intake	20

Semester - I (Minimum Credits required : Core - 24, Elective - 4)

S. No.	Paper Code	Paper title	Course Type	UET	IAT	UEP	IAP	Credit	L:T:P	Total Marks
1.	DBT101	Communication & Broadcasting	Core	75	25			4	3:1:0	100
2.	DBT102	Audio and Video fundamentals	Core	75	25			4	3:1:0	100
3.	DBT103	Television Production	Core	75	25			4	3:1:0	100
4.	DBT104	Radio Production	Core	75	25			4	3:1:0	100
5.	DBT105	Computer Networking	Core	75	25			4	3:1:0	100
6.	DBT106	Radio and TV Production (P)	Core			25	25	2	0:0:2	50
7.	DBT107	Industrial visits - 1	Core			25	25	2	0:0:2	50
8.	DBT108	Term paper	Elective			50	50	4	0:2:2	100
		CBCS/MOOC paper	Elective					4		

Semester - II Courses (Minimum Credits required for : Core - 24, Elective - 4)

S. No.	Paper Code	Paper title	Course Type	UET	IAT	UEP	IAP	Credit	L:T:P	Total Marks
1.	DBT201	Digital broadcast technology	Core	75	25			4	3:1:0	100
2.	DBT202	Satellite and cable broadcasting	Core	75	25			4	3:1:0	100
3.	DBT203	Digital Cinema	Core	75	25			4	3:1:0	100
4.	DBT204	Broadcast Automation	Core	75	25			4	3:1:0	100
5.	DBT205	Post production - Radio and TV	Core	75	25			4	3:1:0	100
6.	DBT206	Post production - Radio and TV (P)	Core			25	25	2	0:0:2	50
7.	DBT207	Industrial visits - 2	Core			25	25	2	0:0:2	50
8.	DBT208	Project	Elective			50	50	4	0:2:2	100
9.	DBT209	Internship	Elective			50	50	4	0:0:4	100
10.	DBT210	Educational Media Production	Elective	75	25			4	3:1:0	100
		CBCS /MOOC paper	Elective					4		

* (P) : Practical paper on operational aspects

2. Credit Equivalence:

Lecture : "n" hours per week of semester for lecture / organized classroom activity will be assigned "n" credits.

Tutorial : "n" hours per week of semester for Tutorial / teacher led organized classroom activity will be assigned "n" credits.

Practical : "2n" hours per week of semester for Laboratory/ Hands on work / in Studio / on Equipment/ Operational Training/ Practical exercise / Internship/ Industrial visit/ Workshop/ Conference participation will be assigned "n" credits

Student self study load: approximated to total credit hours including independent individual/ group study / work / literature survey/ data collection/ field work / writing of papers/ projects /dissertation / thesis/ seminars, etc.

3. Attendance

For appearing in semester examinations, the provisions of Attendance as prescribed in the academic Ordinance 35 (XXXV), and other rules laid down by the university shall be applicable.

4. Evaluation

6.1 Theory Course :

Internal Assessment : 25% of allocated marks
End Semester Examination : 75% of allocated marks

Internal Assessment in a theory course will comprise of two written tests of ten marks each and five marks for attendance, discipline, and participation in the class activities etc. However the theory papers having significant practice component one of the tests for internal assessment may be replaced with viva comprising of ten marks.

6.2 Practical Course :

Internal Assessment : 50% of allocated marks
Practical and Viva Voce Examination : 50% of allocated marks

Internal Assessment in a practical course will be based on the overall assessment of practical/operational exercises carried out by the student during the semester and the reports submitted. Five marks will be reserved for attendance, discipline, and participation in the practical activities etc in the internal assessment.

6.3 Term Paper

Term Paper will be treated as Practical course for assessment. The internal assessment of fifty percent will include periodical progress of the student and quality of the work. The remaining fifty percent marks will be allocated to presentation of term paper and viva to be conducted by external and internal evaluators.

6.4 Industrial visits

Industrial Visits for operational demonstration will be arranged to external/ internal technical facilities. It will be treated as Practical course for assessment. The internal assessment of fifty percent will include attendance, discussions, visit review presentation, etc. The remaining fifty percent marks will be allocated to viva to be conducted by external and internal evaluators.

6.5 Internship / Project

Internship / Project assessment will be treated as Practical course for assessment. Internal assessment of fifty percent will be based on the attendance record / completion certificate provided by the internship supervisor in the visiting establishment/ project report /presentation / Viva/ progress and quality of work. The remaining fifty percent marks will be allocated to Presentation and Viva to be conducted by external and internal evaluators.