# Standard Operating Procedures for Curriculum Revision



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#### **CURRICULUM DIVISION TEAM**

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#### **NCRC SECRETARIES TEAM**

Dr. Noor M. Khan Muhammad Ali Jinnah University

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#### **Standard Operating Procedure (SOP)**

(For Curriculum Revision)

The curriculum with varying definitions is said to be a set of learning which comprises course contents, evaluation, pattern of examination/assessment, teaching methodologies. It can further be elaborated as it incorporates the development of existing syllabi, changing its contents giving guidelines to develop students out-look, raising their competency to meet the requirements of the changing world.

The world has turned into a global village where new ideas and information are pouring in a constant stream. To keep our students abreast with the global changes and the research carried out in the field, there is a need to constantly review/revise the curricula offered in universities/ degree awarding institutions.

The Higher Education Commission (HEC) is continually performing curriculum revision in collaboration with universities and other stake holders. According to the decision of the special meeting of Vice-Chancellor's Committee, the curriculum of a subject is set to be reviewed after every 3-4 years. Curriculum Development/Revision is an organized and systematic process. It involves a number of steps which needs to be considered during curriculum development process by the stake holders.

#### • Step-I Constitution of National Curriculum Revision Committee (NCRC)

This step starts with the Identification of subjects which curricula needs to be revised during the year. The Vice-Chancellors of all public and private sector universities, R & D organizations, councils, colleges and industries are asked to nominate their representative for the discipline under consideration for the constitution of National Curriculum Revision Committee (NCRC). In the selection of participants from the number of nominations received, following parameters are observed:

#### **Selection from Academia:**

- Region-wise participation of all public sector universities offering particular subject (Max 02 and Min 01 member from each university)
- If present, relevant Club-wise participation must be insured
- Participation from institutes located in remote/far flung areas (Max 02 and Min 01 member from each university)
- Participation form well reputed private sector institutions (Max 02 and Min 01 member from each university)
- The faculty member should have at-least 05 years of experience to become a NCRC member
- Having maximum higher degree of qualification, (research in the relevant field should be given priority)
- Must be from relevant area of studies, and should have particular subject as an area of specialization.
- The participation of Secretary of previous NCRC must be insured
- A blended group of NCRC members is suggested to be formulate with lots of experience and fresh
  educational degrees so that maximum range of discussion can be made possible.
   (Note: Participation of both the gender may be ensured where nominations are available)

#### **Selection from Professional Accreditation Councils**

One member from relevant accreditation council where applicable. The nominee should have at least 10 years of practical experience in the relevant field.

#### Selection from Job Market (Industry)

Two members form Job Market through stock exchange's list of major companies keeping in view the subject demand. The nominee should have at least 10 years of practical experience in the relevant field with appropriate educational background.

#### Selection from R & D Organization

One senior member from research and development organization, preferable having a PhD in the relevant field with at-least 05 years of experience, where applicable.

#### **Selection from Civil Society and Alumni**

One member either from civil society or from alumni (eminent personalities, non-academician intellects, newspaper editors, politicians etc.)

#### <u>Duties of Curriculum Division Staff (Deputy Director/AD/Assistant/CO/LDC)</u>

- Putting up of subject list on file for approval of the Competent Authority
- Draft approval of Nomination letter from Higher Authority as per approved list
- Sending of Nomination Request Letters to universities, DAIs, professional accreditation council, R&D organization etc.
- Compilation of received nominations.
- Preparation of subject wise files containing Nomination List/Agenda/old curriculum/foreign curriculum and CVs of nominees.
- Putting up of subject wise files for selection of NCRC members from competent authority
- Preparation of schedule of NCRC meetings with consultation to Regional Offices, where NCRC meetings are planned to be organized.
- Preparation of case of advance for arranging NCRC meeting.
- Preparation of the working paper and agenda for the meeting.
- Communication of relevant material (invitation, agenda, preliminary draft etc.) to NCRC members both in hard/soft form. Copies of invitation letter should also be sent to DG (Acad), Director (RC) for information.
- Continuous follow-up with NCRC members to ensure maximum participation.
- After approval release of advance to regional office for necessary arrangements.
- Coordinate with regional centers for arrangements made for the participants with respect to boarding lodging & logistics.
- Supervise the mailing of stationary items including folders, agenda and copy of old curriculum in case of preliminary meeting & initial draft in case of final meeting to the regional center well before time.

#### **Duties of Regional Office/University (Director/Nominated Focal Person)**

- To cater queries made by NCRC members related to RC.
- Assignment of duties to Deputed staff for coordination with meeting coordinator.
- Arrange Pick and Drop of NCRC Members/Coordinator from Airport/Bus stand etc. and back.

- Ensure the accommodation and other facilities including dinner/tea etc. internet and electricity outlets are in order at the guest house.
- To inform Curriculum Division/Coordinator regarding total number of participants arrived till night before meeting.
- Update well in time to Curriculum Division in case of any change in the plan

#### • Step-II Assessment / Analysis of the existing Curriculum

The existing curricula under consideration (from foreign / local universities) are circulated among the members of NCRC through email and in hard form to discuss it with their colleagues and bring collective proposals for review and revision in relation to:

- a) Objectives (of teaching the subject)
- b) Scheme of studies i.e. total credit hours, duration, list of courses
- c) Course content
- d) Reading materials
- e) Recommendations for effective implementation of curriculum

#### • Step-III NCRC meeting-I: Draft Preparation:

After selection of NCRC Members from the nominations received from various stake holders, the first/preliminary meeting of the NCRC is organized at the HEC Headquarter, Islamabad or at one of its Regional Centers Karachi, Lahore, Quetta and Peshawar, to ensure maximum local input in the exercise of revising a curriculum. Other universities at different places are also invited for the purpose. The meeting lasts for three consecutive days involving detailed discussion and deliberation keeping in view the previous/existing curricula of the subject, latest advancement in the discipline such as available research and curricula taught in the advance countries and local needs of the market and job industry. This three days effort of NCRC members results in preparation of a Preliminary draft of the curriculum under revision. This draft is then discussed by the NCRC members with other faculty members in their universities/DAIs, suggestions and input is gathered to be presented/discussed in the Final meeting.

#### **Duties of Coordinator (officer from HEC Curriculum Division)**

- To reach the center before time of meeting for physical checking of arrangements of gadgets and other instruments of meeting room.
- To facilitate the members with stationary items and other needed documents.
- To collect three days attendance sheet duly signed by every member.
- To coordinate with DG/Director of the respective Regional Center for inauguration of the proceedings of the meeting by introducing the same to members.
- To brief the participants about standard procedures of curriculum revision, in case of preliminary meeting.
- To request the participants to elect Convener/Secretary for the proceedings in case of preliminary meeting.
- After Convener selection handing over the proceedings to the Convener and act as a facilitator for the whole session.
- To provide logistic support to committee members to perform their tasks efficiently (printout etc. internet & other support).

- To check the quality of tea/refreshment/lunch provided to NCRC members.
- To coordinate with Convener/Secretary in compilation of draft curriculum.
- To coordinate with center staff in preparation of TA/DA bills of participants.
- To bring copies of final TA/DA bills from University/Regional Offices for record.
- To capture snaps during the meeting and group photo for record/report purpose.
- To get a deadline from Convener for submit the final draft to HEC

#### **Duties of Convener of NCRC**

- To chair the preceding of the NCRC
- To keep house in order
- To assign duties to sub-committees/ groups formed to review/perform various tasks as per need
- To ensure that house is working as per agenda to get the desired results of NCRC meeting
- To ensure active participation by every member and that all members are given ample chance to convey their suggestion
- To convene meeting in a democratic and conducive environment
- To ensure that the time lines are met to submit draft/final curricula to HEC
- To make sure that HEC guidelines are implemented

#### **Duties of Secretary of NCRC**

- To act as secretary to NCRC
- To keep necessary notes and record minutes/assign any member to record minutes of NCRC proceeding on his/her behalf
- To assist convener during proceedings of NCRC
- To create liaison between the members and convener of the meeting
- To create liaison between members and HEC coordinator/secretariat
- Timely submission of Draft/Final Curriculum to the Convener
- To keep house in order in case of absence of the Convener
- To ensure implementation of HEC guidelines

#### Duties of Regional office/University (Director/Nominated Focal Person)

- Make necessary arrangements for NCRC member, which includes Boarding, Lodging etc.
- To answer queries made by NCRC members related to RC.
- Assignment of duties to Deputed staff for coordination with meeting coordinator
- Pick and drop from Air Port, Bus Stand to Regional office and back
- To assist NCRC members during meeting such as provision of Multimedia, or any other IT and general assistance
- To make necessary payments to NCRC members
- Signature as Controlling Officer on TA bills of participants by Director Regional Center.
- Represent HEC through Regional Office Director at opening day of meeting (if required)
- To capture snaps during the meeting and group photo for record/report purpose.
- To provide standard Refreshment and Lunch during NCRC

#### • Step-IV Appraisal of the Preliminary Draft:

The preliminary draft prepared is circulated by the Convener among the members of NCRC to discuss the same with their colleagues and board of studies for their input to suggest further improvement. The views / recommendations collected are discussed in the final NCRC meeting. In this way maximum number of expert in the field are involved in this exercise. During the interval period of time between first and  $2^{nd}$  (final) meetings, the members of NCRC discuss the preliminary draft curricula through e-mail and exchange the suggestions for improvement of the draft. The coordinator of the meeting from HEC actively participates in all this exercise that is carried out before the final meeting.

#### • Step-V NCRC meeting-II: Finalization of Draft

The second / final meeting of the NCRC is usually held after 3-4 months. The committee finalizes the draft in the light of comments / suggestions / recommendations received from the NCRC members, university / degree awarding Institutions. The second (final) NCRC meeting is also conducted for 3 days. Most of the steps done for preliminary are repeated for this final meeting.

The steps/activities involved Post NCRC Meeting are given as under:

#### **Duties of HEC Coordinator**

- To submit activity report along with minutes of the meeting to higher authorities for approval
- To prepare news item for HEC magazine with approval from competent authority.
- To communicate with Convener & Secretary for attainment of final draft.
- Communication of final draft for proof reading and further processing till printing of the curriculum.
- To follow up the status of curriculum if pending with the convener.
- Adoption of the revised curricula by the Universities/HEI's.

Note: Draft curriculum is sent to the respective secretary NCRC for necessary Editing / proof reading with 15-20 days margin for the return of the same draft from the Convener concerned.

#### **Duties of Convener NCRC**

- To present suggestions/recommendations from various stake holders to members for discussion
- To ensure that approved recommendations/suggestions have been incorporated in the curriculum with the help of secretary of NCRC
- Present the final document of draft/final curriculum to HEC

#### **Duties of Secretary NCRC**

- To ensure that time lines are met to submit draft/final Curriculum paper to HEC.
- To incorporate approved recommendations/suggestions in the Curriculum
- To act as Liaison between members/convener/HEC secretariat where required.
- To keep members and curriculum section of HEC updated about the progress of work done.
- To present the final document of draft/final curriculum to HEC.

- To complete the TA/DA file with in time to ensure timely payment to participants
- To complete reimbursement files and communication of Adjustment to Head office.
- To ensure distribution of remuneration to support staff as per instruction of Head Office.
- To make cases for adjustment of advance and submit the same to Curriculum Division within 15 days of NCRC meeting

#### **Special Meeting/ Sub-Committee Meeting**

Often after both NCRC meetings (Preliminary and Final), if there is some leftover work which needs to be finalized, for the purpose and on the request of Convener of NCRC, a special meeting of selected members (sub-committee) or full NCRC is convened to complete the task. HEC organizes such meetings on special request of the Convener, keeping in view the sensitivity of work/agenda of the meeting, subject to the approval of Competent Authority.

#### • Step-VI Implementation & Monitoring

The curricula designed are printed and circulated to the universities / degree awarding institutions for its adoption / implementation after the approval of the competent authority. Final curricula are also placed on HEC website. The universities / institutions are requested to submit report on the implementation of the curricula. The implementation process is monitored by the Curriculum section with the help of Accreditation body, if available.

#### **Expected outcomes of NCRC Meetings**

It is expected that after completion of revision cycle in two meetings (1 preliminary, 1 final) NCRC members would be able to revise/update/develop an Indigenous need base curriculum, at par with International standards and in line with the global advancements in the area of knowledge in the relevant field. In addition it is also expected that the NCRC members will keep the following para meters under consideration during revision of the curriculum: -

#### Standardize format/scheme of studies developed by HEC

HEC has approved different templates of Basic, Applied and Social Sciences, Engineering Sciences, Agriculture Sciences containing: -

- Number of credit hours of various degrees
- Distribution of compulsory course requirements, general courses, discipline specific courses, major courses, elective courses etc.

The members of NCRC are required to keep these guide line in consideration while devising curricula. (Annex-A)

#### Semester system guidelines

HEC Quality Assurance Division has prepared guidelines for semester system giving guidance about minimum and maximum credits load in a semester, and route of entering in a degree etc. Members of NCRC are required to keep those in mind while planning curriculum and semester load. Details are available at Annex-B.

#### <u>Learning outcomes/competencies/Skill as per Pakistan Qualification Framework</u>

Initial guidelines prepared by the Quality Assurance Division with respect to the learning outcomes, competencies of the degrees along with the purpose, knowledge and skills set of the degree should also be considered by the NCRC (available at Annex-C).

# STANDARDIZED FORMAT / SCHEME OF STUDIES FOR FOUR-YEAR INTEGRATED CURRICULA FOR BACHELOR DEGREE IN BASIC, SOCIAL, NATURAL AND APPLIED SCIENCES

#### **STRUCTURE**

Sr.	Categories	No. of courses Min – Max	Credit Hours Min – Max
1.	Compulsory Requirement (No Choice)	9 – 9	25 – 25
2.	General Courses to be chosen from other departments	7 – 8	21 – 24
3.	Discipline Specific Foundation Courses	9 – 10	30 – 33
4.	Major Courses including research project / Internship	11 – 13	36 – 42
5.	Electives within the major	4 – 4	12 – 12
	Total	40 – 44	124 – 136

Total numbers of Credit hours
 Duration
 Semester duration
 124-136
 4 years
 16-18 weeks

Semesters 8Course Load per Semester 15-18 Cr hr

Number of courses per semester 4-6 (not more than 3 lab / practical courses)

#### **LAYOUT**

Compulsory Requirements (the student has no choice)		General Courses to be chosen from other departments		Discipline Specific Foundation Courses		including	courses g research internship	Elect Courses the m	within	
	9 courses		7-8 courses		9-10 courses		11-13 courses		4 courses	
	25 Credit hours		21-24 C	r. hours	30-33 Cr	edit hours	ours 36-42 Credit hours		12 Credit Hours	
Su	bject	Cr. hr	Subject	Cr. hr	Subject	Cr. hr	Subject	Cr. hr	Subject	Cr. hr
1.	ENGLISH I	3								
2. 3.	ENGLISH II ENGLISH III	3								
4.	ENGLISH IV/ UNIV. OPTIONAL *	3								
5. 6.	PAKISTAN STUDIES ISLAMIC STUDIES /	3								
7.	ETHICS MATHEMATICS I									

8.	MATHEMATICS II / UNIV. OPTIONAL **	2					
9.	INTRODUCTION TO COMPUTER	2					
		3					
		3					
		3					
		25					

- \* University has the option to recommend any other course in lieu of English IV
- \*\* University may recommend any other course in lieu of Mathematics II

#### **MODEL SCHEME OF STUDIES FOR 4 YEAR INTEGRATED BS (HONS)**

Semester/Year	Name of Subject	Credits
First	ENGLISH-I	3
	PAKISTAN STUDIES	2
	MATH/STAT-1	3
	GENERAL-I	3
	GENERAL-II	3
	FOUNDATION-I	3
		17
Second	ENGLISH-II	3
	ISLAMIC STUDIES / ETHICS	2
	MATH/STAT-II / UNIV. OPTIONAL	3
	GENERAL-III	3
	GENERAL-IV	3
	FOUNDATION-II	3-4
		17-18
Third	ENGLISH-III	3
	INTRODUCTION TO COMPUTER	3
	GENERAL-V	3
	GENERAL-VI	3-4
	FOUNDATION-III	3-4
		15-17
Fourth	ENGLISH-IV / UNIV. OPTIONAL	3
	GENERAL-VII	3
	GENERAL-VIII	3
	FOUNDATION-IV	3-4
	FOUNDATION-V	3-4
		15-17
Fifth	FOUNDATION-VI	3
	FOUNDATION-VII	3
	MAJOR-I	3

	MAJOR-II	3-4
	MAJOR-III	3-4
		15-17
Sixth	FOUNDATION-VIII	3
	FOUNDATION-IX	3
	MAJOR-IV	3
	MAJOR-V	3-4
	MAJOR-VI	3-4
		15-17
Seventh	MAJOR-VII	3-4
	MAJOR-VIII	3-4
	ELECTIVE-I	3
	ELECTIVE-II	3
	MAJOR-IX RESEARCH PROJ / INTERNSHIP	3
		15-16
Eight	MAJOR-X RESEARCH PROJ / INTERNSHIP	3
	MAJOR-XI	3-4
	MAJOR-XII	3-4
	ELECTIVE-III	3
	ELECTIVE-IV	3
	TOTAL - 124-136	15-17

<sup>\* 4</sup> Cr Hr must include LAB/Practical

#### **Implementation of**

#### Semester System in Higher Education Institutions of Pakistan

Implementation of Semester System in Higher Education Institutions of Pakistan

Policy Guidelines (Draft)
Prepared by the Higher Education Commission (HEC)



Higher Education Commission, Islamabad, Pakistan

#### Annex-C:

#### <u>Learning outcomes/competencies/Skill as per Pakistan Qualification Framework</u>

Qualification	Associate Degree	Ordinary Bachelor	Bachelor Degree
Level	5	5	6
Purpose	The Associate Degree qualifies individual who apply underpinning technical and theoretical knowledge in arrange of contexts to undertake advanced skilled or paraprofessional work and as a pathway to further learning.	The Bachelor Degree qualifies individual who applies broad and coherent body of knowledge in a range of contexts to undertake professional work and as a pathway for further learning.	The Bachelor Honors Degree qualifies individual who apply body of knowledge in a specific context to undertake professional work and as a pathway for research further learning.
Knowledge	Graduate of Advanced Diploma will have specialized and integrated technical and theoretical knowledge with depth within one or more fields of work and learning	Graduate of Bachelor Degree will have a broad and coherent body ok knowledge, with depth in the underlying principles and concepts in one or more disciplines as a basis for independent lifelong learning.	Graduate of Bachelor Honors Degree will have coherent and advanced knowledge of underlying principles and concepts in one or more disciplines and knowledge of research and principles and methods
Skills	"Graduates of an Associate Degree will have:  Cognitive skills to identify, analyze, synthesis and evaluate information and concept from a range of sources  Cognitive, technical and creative thinking skills to demonstrate a broad understanding of knowledge and ideas with some depth in a discipline  Cognitive, communication and analytical skills to interpret and transmit responses to sometimes complex problems  Communication skills to make a clear and coherent presentation of knowledge and ideas with some intellectual independence	"Graduate of Bachelor Degree will have:  • Cognitive skills to review critically, analyze, consolidate and synthesis knowledge  Cognitive and technical skills to demonstrate a broad understanding of knowledge with depth in some areas  • Cognitive and creative skills to exercise critical thinking and judgment in identifying and solving problems with intellectual independence  • Communication skill to represent a clear, coherent and independent exposition of knowledge and ideas	Graduate of Bachelor Honors Degree will have:  Cognitive skills to review, analyze, consolidate and synthesis knowledge to identify and provide solutions to complex problem with intellectual independence  Cognitive and technical skills to demonstrate a broad understanding of a body of knowledge and theoretical concepts with advanced understanding in some areas  Cognitive skills to exercise critical thinking and judgment in developing new understanding or Technical skills to design and use research in a project  Communication skill to represent a clear and coherent exposition of knowledge and ideas to a variety of audiences.
Application of knowledge and skills	"Graduates of an Associate Degree will demonstrate the application of knowledge and skills:  • With initiative and judgment in planning, problem solving and decision making in paraprofessional practice  • To adapt knowledge and skills in a range of contexts and/or for further studies in one or more disciplines  • To adapt fundamental principles and techniques to known and unknown situations  • with responsibility and accountability for own learning and work and in collaborations with others within broad parameters	"Graduate of Bachelor Degree will demonstrate the application of knowledge and skills:  • With initiative and judgment in planning, problem solving and decision making in professional practice and/or scholarship  • To adapt knowledge and skills in diverse contexts  • With responsibility and accountability for own learning and professional practice and in collaboration with others within broad parameters	Graduate of Bachelor Honors Degree will demonstrate the application of Knowledge and skills:  • With initiative and judgment in professional practice and/or scholarship  • To adapt knowledge and skills in diverse contexts  • With responsibility and accountability for own learning and practice and in collaboration with others within broad parameters  • To plan and execute project work and/or a piece of research and scholarship with some independence

Qualification	Master Degree	Doctoral Degree
Lovel	7	Q
Purpose	The Masters Degree (Research) The Master Degree (Research) qualifies individuals who apply an advanced body of knowledge in a range of contexts for research and scholarship and as a pathway for further learning.	The Doctoral Degree qualifies individuals who apply a substantial body of knowledge to research, investigate and develop new knowledge in one or more fields of investigation, scholarship or professional practice.
Knowledge	Graduate of Master Degree (Research) will have:  • A body of knowledge that includes the understanding of recent developments in one or more disciplines  • Advanced knowledge of research principle and methods applicable to the field of work or learning	Graduate of Doctoral Degree will have:  • A substantial body of knowledge at the frontier of a field of work or learning, including knowledge that constitute an original contribution  • Substantial knowledge of research principles and methods applicable to the field of work or learning
Skills	Graduate of a Master Degree (Research) will have: Cognitive skills to demonstrate mastery of theoretical knowledge and to reflect critically on theory and its application Cognitive, technical and creative skills to investigate, analyses and synthesize complex information, problems, concepts and theories to apply established theories to different bodies of knowledge or practice Cognitive, technical and creative skills to generate and evaluate complex ideas and concepts at an abstract level Cognitive and technical skills to design, use and evaluate research and research methods Communication and technical skills to present a coherent and sustained argument and to disseminate research results to specialist and non-specialist audiences Technical and communication skills to design, evaluate, implement, analyses, theories and disseminate research that makes a contribution to knowledge	Graduate of Doctoral Degree will have:  Cognitive skills to demonstrate expert understanding of theoretical knowledge and to reflect critically on that theory and practice  Cognitive skills and use of intellectual independence to think critically, evaluate existing knowledge and ideas, undertake systematic investigation and reflect on theory and practice to generate original knowledge  Expert technical and creative skills applicable to the field of work or learning  Communication skills to explain and critique theoretical propositions, methodologies and conclusions  Communication skills to present cogently a complex investigation of originality or original research for external examination against international standards and to communicate results to peer and the community  Expert skills to design, implement, analyze, theories and communicate research that makes a significant and original contribution to knowledge and/or professional practice
Application of knowledge and skills	Graduate of Master Degree (Research) will demonstrate the application of knowledge and skills:  • With creativity and initiative to new situations and/or for further learning  • With high level personal autonomy and accountability  • To plan and execute a substantial piece of research	Graduate of Doctoral Degree will demonstrate the application of knowledge and skills:• With intellectual independence• With initiative and creativity in news situations and/or for further learning• With full responsibility and accountability for personal outputs• To plan and execute original research• With the ongoing capacity to generate new knowledge, including in the context of professional practice

#### **Standard Letters Templates of Curriculum Division:**



#### HIGHER EDUCATION COMMISSION

### H-9, Islamabad (Pakistan)

Phone: 000000000, Fax:0000000000,

E-mail:

### **Director General (Academics)**

No. 9-3/Nomination/Curri/HEC/000

Dated

Subject: REQUEST TO NOMINATE TWO SUBJECT EXPERTS FOR CONSTITUTION OF NATIONAL

CURRICULUM REVISION COMMITTEE (NCRC) IN \_\_\_\_\_ DISCIPLINE

My Dear Vice Chancellor,

Curriculum Development, Review and Revision at Graduate and Post-graduate level is one of the major on-going activities of Higher Education Commission as provided under Section (10) Sub-Section (V) of its Ordinance No. LIII of 2002 and Ministry of Education, Government of Pakistan Notification No. D.733/76-JEA(Curr) dated December 4, 1976. In pursuance of the decision of 44<sup>th</sup> meeting of the Vice-Chancellors' Committee, HEC takes up the curricula of a particular discipline, for periodic review after every three years. Its prime objective is to revise and update the existing curriculum to bring it in line with national requirements and introduce innovations to ensure quality of education and uniformity of curricula in the universities and affiliated colleges of Pakistan.

The Commission undoubtedly realizes the autonomous status of universities and the academic pursuits in promoting higher education, uniquely and independently. Still, there remains an ardent need to draw a base line for the minimum requirement of the contents of syllabi and to ensure that it is modern enough to track changes taking place globally in each discipline. To address the issue HEC has no other source but the experts and intelligentsia available in the universities, Research & Development Organizations, Councils, Industries and other institutions of higher learning. Only these experts are competent to suggest critical changes in a curriculum. Besides, we are always prepared to take advantage of the constructive academics developments in any of the universities to benefit other institutions of Higher Education in the country by bringing these propagations to a common forum, provided by HEC.

Procedurally, we seek nominations from universities, Research & Development Organizations, Councils and Industries to constitute National Curriculum Revision Committees which in their

Preliminary meetings prepare a Draft Model Curriculum which is placed on the HEC website <a href="www.hec.gov.pk">www.hec.gov.pk</a> subsequently. Suggestions/recommendations of expatriate and local subject specialists are invited for improvement of draft. These recommendations are considered in the Final Meeting. Thus it may rightly be claimed that there is a direct and indirect participation of all those involved in the teaching, research & development of a subject in the refurbishing of its curriculum.

Higher Education Commission has initiated an exercise to revise the existing curricula keeping in view the unified framework for BS 4-Year Program during the current year, which are as follows: 
1.

You are, therefore, requested to nominate two experts in the above subjects relevant to your university or affiliated institutions on the enclosed proforma. Your response, latest by \_\_\_\_\_\_\_, would greatly help us in constituting National Curriculum Revision Committees for the purpose.

With best regards,

Yours sincerely,

Encl: As above

-----S.d-----

# **Proforma for Nomination of experts for**



# **HIGHER EDUCATION COMMISSION**

H-9, Islamabad (Pakistan), Phone: (051) 00000000, Fax: 0000000

NOMINATION OF EXPERTS ON HEC		
NATIONAL CURRICULUM REVISION COMMITTEE IN THE SUBJECT:		
Name:		
Designation:		
University / Institution:		
Department:		
Address:		
Office:		
Residence:		
<u>Telephone:</u>		
Office:		
Residence:		
Fax. No.		
E-mail		
Qualification with Year:	Qualification	Year

Research Area:	
Specialization Field:	
University / Institute last attended:	
Experience:	
Publications during the last 5 years (Use extra sheet, if necessary)	



# H-9, Islamabad (Pakistan)

Phone: (051) 90402441, 90402444 Fax: (051) 4447945

E-mail: gfatima@hec.gov.pk

**Director General (Academics)** 

							No. 9-301	/Curri/HE0	C/09/
								C	ated
Subject:		RICULUM REVISI	ON COMN	NITTEE N	<u>/IEETING I</u>	N	FROM	TO	
	AT HEC REGION	IAL CENTRE	<del></del>						
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<u>Enclosures</u>									
1) Standar	d format for disp	olav							
,		,						S.d	



# H-9, Islamabad (Pakistan)

MIGHER EDICATION COMMISSION	F-	Phone: (051) 9 mail:	04024	<b>42,</b> Fax: (051) 9	0402449		
Deputy Dire	ector (Curriculu						
				No. 9-21	L5/Comm	ents/Curri/HEC/(	0000
						D	ated
Subject:	COMMENTS /	SUGGESTIONS	ON	PRELIMINARY	DRAFT	CURRICULUM	IN
Dear Sir / Ma	dam,						
00-18, 2008 at	Kindly find enclose HEC Regional Cent	ed preliminary draft er, Karachi.	t curric	ulum prepared by	NCRC me	eting held on Oct	ober
	You are requeste stions for its improve which is expected in the state of the state		objectiv	es and its conten		_	
	With best regards	i,					
						Yours since	rely,
						S.d-	



# H-9, Islamabad (Pakistan)

Phone: (051) 90402441, 90402444 Fax: (051) 4447945

E-mail: gfatima@hec.gov.pk

### **Deputy Director (Curriculum)**

**Industrial Engineering** 

**International Relations** 

14.

15.

No. 9-195/Adoption Status/Curri/HEC/09

				11013 133/11	aoption stat	as, ca	, 20, 03
							Dated
Subject:		OOPTION / IMPLEMENTATION DUCATION COMMISSION DURING _			REVISED	ВҮ	HIGHER
Dear Sir / I	Mada	m,					
adoption c	of follo	Kindly refer to this office letters issued owing curricula revised by the HEC during		•	and 2009 in	conne	ection with
1		Aerospace Engineering	16.	Islamic Studies	5		
2	2.	Architecture	17.	Mass Commur	nication		
3	3.	Avionic Engineering	18.	Mathematics			
4	١.	Bio-Medical Engineering	19.	Mechanical En	gineering		
5	j.	Botany	20.	Metallurgy and	d Materials E	ingg	
6	õ.	Chemical Engineering	21.	Microbiology			
7	<b>'</b> .	Chemistry	22.	Mining Engine	ering		
8	3.	Civil Engineering	23.	Pakistan Studi	es		
9	).	Economics	24.	Petroleum Eng	gineering		
1	.0.	Electrical Engineering	25.	Physics			
1	.1.	Electronic Engineering	26.	Political Science	ce		
1	2.	English	27.	Statistics			
1	.3.	Environmental Engineering	28.	Telecommunic	cation Engine	ering	

29.

30.

**Textile Engineering** 

Zoology

You are requested to kindly send us adoption / implementation status of the above curricula, releval institution, on the enclosed proforma by	nt to your
Your cooperation in this regard would highly be appreciated.	
With best regards, Yours	sincerely
	-S.d

#### PROFORMA FOR ADOPTION STATUS OF CURRICULA IN PUBLIC AND PRIVATE SECTOR UNIVERSITIES

	Name of University  Existence of Release  Department	Existence of Relevant	Adoption Status			
Sr.		Department	Yes	Under Process	No	Remarks
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
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11.						
12.						
13.						
14.						

		Existence of Relevant	Adoption Status			
Sr.	Name of University	Department	Yes	Under Process	No	Remarks
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16.						
17.						
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# H-9, Islamabad (Pakistan)

Phone: (051) 9000000, 904024464 Fax: 0000000000

E-mail:

# **Assistant Director (Curriculum)**

					No. 9-2	13/Ent	omology	/Curri/HEC/09	)/
								July 28, 201	0
Subject:	COMPILATION /	PROOF	READING	AND	EDITING	OF	FINAL	CURRICULUI	<u>VI</u>
	IN	<u>.</u>							
Dear Sir,									
	y refer to NCRC Fina	al meeting i	n the discip	line of _		held	d on	at HE	С
Regional Cente	er								
								ased on unifie	
with Secretary	ovided by the Commi and other member	s through e	-mail, or an	y other	mode for o	compil	ation, ed	iting and prod	
reading of the	final draft curriculun	n. <b>Compulso</b>	ory courses t	o be inc	luded in th	e curr	iculum a	re enclosed.	
Λ	s recognition of yo	our intellect	tual innut a	and con	amitment :	towar	ds produ	icina a qualit	<b>-</b> 1.7
	C will pay you remun		•				·		
	ed document latest b				of the NCI	\C. 100	a are requ	dested to killu	y
provide ilitalize	ed document latest t	, y	and obt	ige.					
	With best regards,								
							,	Yours sincerel	у,
<u>Enclosures</u>									
Compulsory Co	ourses								
compansory co									

-----S.d-----



H-9, Islamabad (Pakistan)

Phone: (051) 900000, Fax: (051) 90000000, E-mail:

**Director General (Academics)** 

No. 9-214/Adoption/Curri/HEC/00/

August 00, 2013

Subject: <u>ADOPTION / IMPLEMENTATION OF CURRICULA REVISED BY HEC DURING THE YEAR 2011-</u> 12.

Dear Vice-Chancellor,

Curriculum development, review and revision at BS and MS/MPhil level is one of the major ongoing activities of Higher Education Commission as provided under section (10) sub-section (V) of its Ordinance No. LIII of 2002 and Ministry of Education, Government of Pakistan notification No. D.773/76-JEA (Curr) dated December 4, 1976. In pursuance of the decision of 44<sup>th</sup> meeting of the Vice Chancellors' Committee, HEC takes up the curricula of a particular discipline, for periodic review after every three/four years. Its prime objective is to revise and update the existing curriculum to bring it in line with national requirements and introduce innovation to ensure quality of education, its compatibility to international standards and uniformity of curricula in the universities and affiliated colleges of Pakistan.

- 2. In view of aforementioned constitutional obligation and decision of the Vice-Chancellors' Committee, a periodic revamping and refurbishing of curricula is under-taken by experts drawn from Universities, Research and Development Organizations and other stakeholders including user organizations and agencies in the process. The idea is to make education and training imparted in universities more relevant to needs of society.
- 3. I am forwarding herewith one copy of each curricula reviewed/revised by the National Curriculum Revision Committee (NCRC) during financial year 2011-12 for adoption/implementation (List of Curricula at Annex "A"). These curricula can be downloaded from the HEC website <a href="http://www.hec.gov.pk/InsideHEC/Divisions/AECA/CurriculumRevision/Pages/RevisedCurricula.aspx">http://www.hec.gov.pk/InsideHEC/Divisions/AECA/CurriculumRevision/Pages/RevisedCurricula.aspx</a>
- 4. It would be highly appreciated, if the University could facilitate its affiliated colleges to constitute an Academic Council, in order to ensure standard delivery of quality education, compatible at both college and university levels. The implementation report by your university / institution may also be forwarded to this office at the earliest.

With best regards,

Yours sincerely,

(S/D)

**Vice Chancellors of All Public / Private Sector Universities** 



# H-9, Islamabad (Pakistan)

Phone: (051) 90402446, 90402444, Fax: (051) 90402449

E-mail: <a href="mailto:rhaque@hec.gov.pk">rhaque@hec.gov.pk</a>

No. 9-279/Genetics/Curri/HEC/2011/

	April 01, 2013
Subject:	FINAL CURRICULUM OF GENETICS
Dear Sir,	
final meeting h	Kindly find enclosed the final version of Genetics curriculum, developed by HEC NCRC in its eld on May 2-4, 2012 at HEC Regional Centre, Karachi.
<b>2.</b> may be further	It would be highly appreciated if you could vet the document and send to us so that the same processed for printing.
	With best regards,
	Yours faithfully,
Enclosed: As ab	pove
	(S/D)
Dr. ABC,	
Convener,	



**Enclosed:** As above

### **HIGHER EDUCATION COMMISSION**

# H-9, Islamabad (Pakistan)

Phone: (051) 90402446, 90402444, Fax: (051) 90402449

E-mail: rhaque@hec.gov.pk

**Assistant Director (Curriculum)** 

	No. 9-279/Genetics/Curri/HEC/2011/
	April 01, 2013
Subject:	FINAL CURRICULUM OF GENETICS
Dear Madam,	
final meeting h	Kindly find enclosed the final version of Genetics curriculum, developed by HEC NCRC in its eld on May 2-4, 2012 at HEC Regional Centre, Karachi.
<b>2.</b> may be further	It would be highly appreciated if you could vet the document and send to us so that the same processed for printing.
	With best regards,
	Yours faithfully,

(S/D)



# H-9, Islamabad (Pakistan)

Phone: (051) 90402446, 90402444, Fax: (051) 90402449

E-mail: <a href="mailto:rhaque@hec.gov.pk">rhaque@hec.gov.pk</a>

No. 9-279/Genetics/Curri/HEC/2011/

**Assistant Director (Curriculum)** 

	April 01, 2013
Subject:	FINAL CURRICULUM OF GENETICS
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<b>2.</b> may be furthe	It would be highly appreciated if you could vet the document and send to us so that the same r processed for printing.
	With best regards,
	Yours faithfully,
Enclosed: As a	above (S/D)
Dr. XYZi,	
Convener,	
Copy sent to:	
Dr. ABC,	
Secretary,	



# H-9, Islamabad (Pakistan)

Phone: (051) 90402446, 90402444, Fax: (051) 90402449

E-mail: <a href="mailto:rhaque@hec.gov.pk">rhaque@hec.gov.pk</a>

Assistant	Director (	(Curriculum)
ASSISTALL	DII CCCOI 1	Carrearant

Assistant Di	rector (curriculum)
	No. 9-271/Petroleum & Gas Engg./Curri/HEC/11/
	January 00, 2013
Subject:	FINAL CURRICULUM OF PS ENG.
Dear Sir,	
above (copy en	Reference this office letter of even number dated November 12, 2012, on the subject cited closed) & email sent to Engr. Sahib on 17-01-2013.
2. convenience.	Kindly expedite the matter and furnish the comments on the above subject at your earliest
	Yours faithfully,
	(S/D)
Prof. Dr.	
Convener	