



Ref: No: IUD/ITS/2020/BoS1\_BCA\_MCA

Date: December 15, 2020

### **Subject: Minutes of Meeting of BoS for BCA (2021-24) and MCA (2021-23) Programs**

The meeting of Board of Studies (BoS) for BCA (2021-24) and MCA (2021-23) programs was held on December 11, 2020 at the Board Room. The Following members were present at the meeting:

- |   |                                   |
|---|-----------------------------------|
| 1. Prof. (Dr.) Muddu Vinay (Vice Chancellor, IUD)   | Chairman                          |
| 2. Dr. Narayana Swamy M<br>(Professor and Principal, BEL First Grade College,<br>Bangalore)   | External Member<br>(Online, Zoom) |
| 3. Mrs. Sharada Prasadita Vajjha<br>(Independent IT Consultant Formerly Senior,<br>Vice President-Head Continental Europe Delivery,<br>Tech Mahindra) | External Member<br>(Online, Zoom) |
| 4. Mr. G F Chakravarthi(In-charge, ITS)   | Member                            |
| 5. Dr. Sanjeev Kumar (Academic Coordinator, ITS)  | Member                            |
| 6. Prof. Amit Das (Director Centre for AI and ML, ITS)  | Member                            |
| 7. Dr. T K Mandal ( In Charge, CICIB, IUD)  | Member                            |
| 8. Dr. V N Saxena (Head IQAC, IUD)  | Member                            |
| 9. Dr. Gaurav Bhandari (Asst. Professor, ITS)   | Member                            |

The Chairman (Honorable Vice Chancellor, The ICFAI University, Dehradun) welcomed the board members and put the meeting to order. He explained that the purpose of this meeting is to develop the program structure and syllabi for BCA (3 Years) and MCA (2 Years) programs of ICFAI Tech School, The ICFAI University, Dehradun as these are proposed to be introduced w.e.f. Academic Year 2021-2022.

### **Agenda and Resolution:**

The BoS had a detailed discussion on semester wise subjects, practical components and syllabi for 3 years of BCA program and 2 years of MCA Programs among the faculty members of ITS,IUD and external experts.



### The BoS observed the following points:

1. Practical exposure should be maximize.
2. In order to maximizing the job opportunities course such as IT Security and IT Services management should be incorporated in both BCA and MCA program structures.
3. Provision for Credit transfer with MOOC courses should be provided.
4. Trending courses such as Artificial Intelligent, Machine Learning, Data Analytics should be offered as a mandatory course.

### The Proposed BCA program general structure to BoS members

#### BCA Program General Structure (Proposed)

Year	Course Code	Semester I	L	P	U	Course Code	Semester II	L	P	U	
<b>I</b>		Fundamental of IT	3	0	3		Principles of Economics	3	0	3	
		Introduction to Unix	3	2	4		Computer Programming	3	2	4	
		Mathematics I	3	0	3		Mathematics II	3	0	3	
		Soft Skills I	2	2	3		Soft Skills II	2	2	3	
		Environmental Studies	2	0	2		Discrete Mathematics	3	0	3	
		Basic Digital Electronics	3	0	3		Introduction to Algorithms	3	0	3	
<b>Total No of Credits</b>					<b>18</b>	<b>Total No of Credits</b>					<b>19</b>
Year	Course Code	Semester I	L	P	U	Course Code	Semester II	L	P	U	
<b>II</b>		Data Structures	3	2	4		Operating Systems	3	0	3	
		Computer Organization & Architecture	3	0	3		Database Management Systems	3	2	4	
		System Analysis and Design	3	0	3		Java Programming	3	2	4	
		Object Oriented Programming	3	2	4		Software Engineering	3	0	3	
		Management Information Systems (MIS)	3	0	3		Value added Course II	3	0	3	
		Value added Course I	3	0	3		Elective I	3	0	3	
<b>Total No of Credits</b>					<b>20</b>	<b>Total No of Credits</b>					<b>20</b>
<b>Summer Internship Program (8 Weeks)</b>										<b>5</b>	
Year	Course Code	Semester I	L	P	U	Course Code	Semester II	L	P	U	
<b>III</b>		Introduction to Python	3	2	4		Elective IV	3	0	3	



	Web Technologies	3	2	4		Elective V	3	0	3	
	Computer Networks	3	0	3		Major Project			15	
	Minor Project	3	0	3						
	Elective II	3	0	3						
	Elective III	3	0	3						
	<b>Total No of Credits</b>				<b>20</b>	<b>Total No of Credits</b>				<b>21</b>
<b>Total No of Credits</b>										<b>123</b>

### Revised BCA program general structure as suggested by BoS members:

#### Final BCA Program general structure:

Year	Course Code	Semester I	L	P	U	Course Code	Semester II	L	P	U
<b>I</b>		Fundamental of IT	3	2	4		Data Structures with C++	3	2	4
		Computer Programming I	3	2	4		Operating Systems with Unix	3	2	4
		Mathematics I	3	0	3		Mathematics II	3	0	3
		Soft Skills I	2	2	3		Soft Skills II	2	2	3
		Principles of Economics	3	0	3		Discrete Mathematics	3	0	3
		Environmental Studies	2	0	2		System Analysis and Design	3	0	3
	<b>Total No of Credits</b>				<b>19</b>	<b>Total No of Credits</b>				<b>20</b>
<b>II</b>		Introduction to Algorithms	3	0	3		Database Management Systems	3	2	4
		Computer Organization & Architecture	3	0	3		Java Programming	3	2	4
		Introduction to Networks	3	2	4		Software Engineering	3	0	3
		IT Services Management	3	2	4		Introduction to AI	3	0	3
		MOOC Course	3	0	3		Value added Course II	3	0	3
		Value added Course I	3	0	3		Elective I	3	0	3
	<b>Total No of Credits</b>				<b>20</b>	<b>Total No of Credits</b>				<b>20</b>
<b>Summer Internship Program (8 Weeks) / Major Project/Certification course</b>										<b>5</b>
Year	Course Code	Semester I	L	P	U	Course Code	Semester II	L	P	U
<b>III</b>		Introduction to Python	3	2	4		IT Security	3	2	4



	Web Technologies	3	2	4		Elective IV	3	0	3
	Advanced Computer Networks	3	2	4		Major Project			14
	Minor Project	3	0	3					
	Elective II	3	0	3					
	Elective III	3	0	3					
	<b>Total No of Credits</b>			<b>21</b>		<b>Total No of Credits</b>			<b>21</b>
	<b>Total No of Credits</b>								<b>126</b>

### The Proposed MCA program general structure to BoS members

#### MCA Program General Structure (Proposed)

Year	Semester I	L	P	U	Semester II	L	P	U	
I	Computer Programming C Language	3	2	4	Digital Electronics	3	0	3	
	Probability and Statistics	4	0	4	R Programming	3	2	4	
	Discrete Mathematics	3	0	3	Computer Networks	3	0	3	
	DBMS	3	2	4	Object Oriented Programming	3	2	4	
	Professional Communication	3	0	3	Data Structures	3	0	3	
	Environmental Studies	2	0	2	Computer Organization & Architecture	3	0	3	
	<b>Total No of Credits</b>	<b>20</b>			<b>Total No of Credits</b>	<b>20</b>			
	<b>8 Weeks Summer Internship/ Minor Project/ MOOCS</b>						<b>5</b>		
Year	Semester I	L	P	U	Semester II	L	P	U	
	Introduction to Python	3	2	4	Web technologies	3	2	4	
	Design and Analysis of Algorithms	3	2	4	Management Information Systems (MIS)	3	0	3	
	Operating Systems	3	0	3	Data Warehouse and Data Mining	3	0	3	
	Software Engineering	3	0	3	Elective III	3	0	3	
	Elective I	4	0	4	Seminar			2	



	Elective II	4	0	4	Major Project			8	
	<b>Total No of Credits</b>	<b>22</b>			<b>Total No of Credits</b>	<b>23</b>			
	<b>Program Total Credits</b>						<b>88</b>		

### Revised MCA program general structure as suggested by BoS members:

#### Final MCA Program general structure:

Year	Semester I	L	P	U	Semester II	L	P	U	
I	POP & OOP Programming Languages	3	2	4	Computer Organization & Architecture	3	0	3	
	Probability and Statistics	4	0	4	R Programming	3	2	4	
	Discrete Mathematics	3	0	3	Computer Networks	3	2	4	
	Data Base Management Systems	3	2	4	IT Security	3	2	4	
	Professional Communication	3	0	3	Data Structures with C++	3	0	3	
	Environmental Studies	2	0	2	Introduction to AI	3	0	3	
	<b>Total No of Credits</b>	<b>20</b>			<b>Total No of Credits</b>	<b>21</b>			
	<b>8 Weeks Summer Internship/ Minor Project/ MOOCS</b>						<b>5</b>		
Year	Semester I	L	P	U	Semester II	L	P	U	
II	Machine Learning using Python Programming	3	2	4	Web technologies	3	2	4	
	Design and Analysis of Algorithms	3	2	4	IT Services Management	3	2	4	
	Operating Systems with Unix	3	0	3	Data Warehouse and Data Mining	3	0	3	
	Software Engineering	3	0	3	Elective III	3	0	3	
	Elective I	4	0	4	Seminar			2	
	Elective II	4	0	4	Project			6	
	<b>Total No of Credits</b>	<b>22</b>			<b>Total No of Credits</b>	<b>22</b>			
	<b>Program Total Credits</b>						<b>90</b>		



**The ICFAI University  
Dehradun**


(Established under Section 4(2) of  
The ICFAI University Act, 2003)



Rajawala Road,  
Central Hope Town, Selaqui,  
Dehradun - 248197  
Phone: 0135-3003010/02

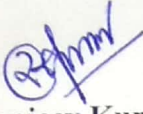
# Cloud computing subject should be added to the list of electives.

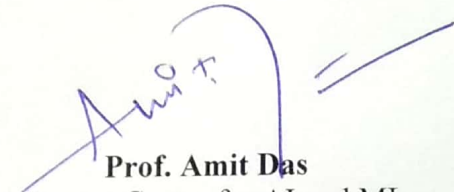
The meeting was concluded with vote of thanks.

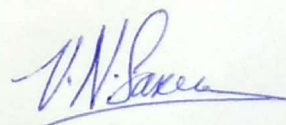
  
**Prof. G F Chakravarthi**  
(In-Charge, ICFAI Tech School)

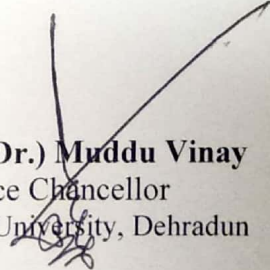
*Approved through  
e-mail attached*  
**Dr. Narayana Swamy M**  
External Member  
(Professor and Principal, BEL  
First Grade College, Bangalore)

*Approved through  
e-mail attached*  
**Mrs. Sharada Prasadita Vajjha**  
External Member  
(Independent IT Consultant  
Formerly Senior, Vice President-  
Head Continental Europe  
Delivery, Tech Mahindra)

  
**Dr. Sanjeev Kumar**  
(Academic Coordinator, ICFAI  
Tech School)

  
**Prof. Amit Das**  
(Director Centre for AI and ML,  
ICFAI Tech School)

  
**Dr. V N Saxena**  
(Head IQAC, IUD)

  
**Prof. (Dr.) Muddu Vinay**  
Vice Chancellor  
The ICFAI University, Dehradun



Sanjeev Kumar &lt;sanjeev.kumar@iudehradun.edu.in&gt;

---

**Revised: ICFAI-MoM-BoS\_BCA\_MCA**

---

**Narayan M** <narayan1973.mns@gmail.com>

Thu, Dec 17, 2020 at 3:38 PM

To: sharada.prasadita@gmail.com

Cc: "dean.fst ." &lt;dean.fst@iudehradun.edu.in&gt;, IU Dehradun VC &lt;vc@iudehradun.edu.in&gt;, "academics.fst ." &lt;academics.fst@iudehradun.edu.in&gt;, Sanjeev Kumar &lt;sanjeev.kumar@iudehradun.edu.in&gt;, G F CHAKRAVARTHI &lt;gf.chakravarthi@iudehradun.edu.in&gt;, Amit Das &lt;amitdas@iudehradun.edu.in&gt;, TAPAN MANDAL &lt;dr.mandal@iudehradun.edu.in&gt;, GAURAV BHANDARI &lt;gaurav.bhandari@iudehradun.edu.in&gt;, Saxena VN &lt;vn.saxena@iudehradun.edu.in&gt;, "IQAC ." &lt;iqac@iudehradun.edu.in&gt;

Dear All

Thanks for incorporating suggestions.  
Please consider this as my approval for revision of BCA & MCA syllabus

Thank you

Narayana Swamy

[Quoted text hidden]



Sanjeev Kumar &lt;sanjeev.kumar@iudehradun.edu.in&gt;

---

**Revised: ICFAI-MoM-BoS\_BCA\_MCA**

---

**sharada.prasadita@gmail.com** <sharada.prasadita@gmail.com>

Thu, Dec 17, 2020 at 11:22 AM

To: "dean.fst ." &lt;dean.fst@iudehradun.edu.in&gt;

Cc: narayan1973.mns@gmail.com, IU Dehradun VC &lt;vc@iudehradun.edu.in&gt;, "academics.fst ." &lt;academics.fst@iudehradun.edu.in&gt;, Sanjeev Kumar &lt;sanjeev.kumar@iudehradun.edu.in&gt;, G F CHAKRAVARTHI &lt;gf.chakravarthi@iudehradun.edu.in&gt;, Amit Das &lt;amitdas@iudehradun.edu.in&gt;, TAPAN MANDAL &lt;dr.mandal@iudehradun.edu.in&gt;, GAURAV BHANDARI &lt;gaurav.bhandari@iudehradun.edu.in&gt;, Saxena VN &lt;vn.saxena@iudehradun.edu.in&gt;, "IQAC ." &lt;iqac@iudehradun.edu.in&gt;

Hello

Thanks for incorporating our suggestions- it does look good!

I don't have a pdf writer - so please consider this my approval of the revision! Thank you

Warm Regards  
Sharada  
+91 9849386012

On 15-Dec-2020, at 5:12 PM, dean.fst . &lt;dean.fst@iudehradun.edu.in&gt; wrote:

[Quoted text hidden]

&lt;ICFAI\_Dehradun\_MoM BoS BCA MCA.pdf&gt;