SAMBALPUR UNIVERSITY

JYOTI VIHAR: DIST.-SAMBALPUR (ODISHA)-768 019
Accredited with 'A' Grade by NAAC
www.suniv.ac.in

By Post & e-Despatch

No. _____1585_____/Acd.I   Dated the, ___13/03/19___

To,

The Principals
(All the affiliated Colleges having Three Year Degree Courses)
For Special Attention of the Colleges having B.Sc. (Hons.) Course in Computer Science.

Sub: Detail Syllabus for DSE-4 – "Big Data Analytics".

Ref: This Office Letter No. 6009/Acd.I, dated. 09.10.2018.

Sir,

In inviting a reference to the subject and letter cited above, I am directed to intimate you that the Board of Studies in Computer Science has recommended detail Syllabus for DSE-4 – "Big Data Analytics" for B.Sc. (Hons.) Computer Science Course for the students under CBCS. A copy of said syllabus is enclosed for your reference and needful.

The approval of the said syllabus will be taken up in due process.

This may be notified to the teachers and students concerned of your College and to ensure teaching accordingly.

Encl:- As above.

Yours faithfully,

Controller of Examinations

Dated the, ___13/03/19___

Memo No. _____1586_____/Acd.I

Copy forwarded with enclosure for information and necessary action to:-

1. Asst.Registrar (Exam.)/Asst.Controller of Examinations (P)/The Programmer, Sambalpur University, Jyoti Vihar.
2. Section Officer, EG-I/EG-II/EC-I/EC-II/EC-VI Sections.
3. The System-in-Charge, e-Governance Cell, Sambalpur University to give it in Notice Board.
4. Dealing Assistant, Question Paper Setting, U.G.Courses, EC-VI Section for needful.
5. 05 (Five) spare copies to Acd.I Section.

Controller of Examinations

/bkb/c-1/

XIV. Big Data Analytics

Objectives

- To provide practical foundation that enables immediate and effective participation in big data projects.
- Analyze Business case studies for big data analytics.
- To understand basic and advanced methods to big data technology and tools.

Outcomes

- Learn tips and tricks for Big Data and use cases from selected business domains.
- Learn to build and maintain reliable, scalable, distributed systems with Apache Hadoop.

Distributed file system Basics, Running Example programs. Big Data and its importance. Four V's in bigdata, Drivers for Big data, Big data analytics, Big data applications.

Big Data, Apache Hadoop & Hadoop EcoSystem, Moving Data in and out of Hadoop. Understanding inputs and outputs of MapReduce, Data Serialization.

Hadoop Architecture, Hadoop Storage, Hadoop MapReduce paradigm. Map and Reduce tasks, Hadoop Configuration. Hadoop distributed file system (HDFS) Administering. Monitoring & Maintenance.

Data Warehousing, Data Mining, Cluster Analysis, Association Rule Mining.

References:

1. Tom White, "HADOOP: The Definitive Guide", Third Edition, O Reilly, 2012.

2. Vignesh Prajapati, "Big Data Analytics with R and Haoop", Packet Publishing 2013.

3. Boris lublinsky, Kevin t. Smith, Alexey Yakubovich, "Professional Hadoop Solutions", Wiley, 2015.

4. Chris Eaton, Dirk deroos et al. , "Understanding Big data ", McGraw Hill, 2012.

By Post & e-despatch,

Date, 09/10/16

No. 6009 /Acd-i

To
The Principals
(All affiliated Colleges for Special attention of
Colleges within B.Sc. Computer Science (Hons)).

Sub: DSE Papers for B.Sc. in Computer Science Hons. students.

Ref: This office letter No.8417/Acd.I dt.04 11.2016.

Sir,

In inviting a reference to the subject and letter cited above, I am directed to say that in the approved syllabus for B.Sc. in Computer Science (Hons.) 15 nos. of Papers has been prescribed as DSE courses. A student has to opt two papers each during V & VI Semester from the said papers. To avoid confusion and dislocation in examination process, the choice of papers have been put under limitation.

The B.Sc. Hons. in Computer Science students be offered DSE Papers as per the following table.

During - V Semester	DSE-1	Information Security
	DSE-2	Cloud Computing
During – VI Semester	DSE-3	Data Mining
	DSE-4	Big Data Analytics

The detail syllabus for the said papers will be same as the detail syllabus in the approved syllabus forwarded vide letter No.8417/Acd.I, dated. 04.11.2016.

You are requested to notify it to all the students and teachers concerned. Further, you are requested to ensure teaching of the course in your College accordingly.

Any errors and omission, etc. may kindly be intimated to this office.

Yours faithfully

Controller of Examinations