



Bachelor of Computer Applications Specialisation in Data Analytics

PROGRAMME CODE 004B

COURSE CODEB6

1. What is Analytics?

Analytics is the discovery and communication of meaningful patterns in data. Especially valuable in areas rich with recorded information, analytics relies on the simultaneous application of statistics, computer programming and operations research to quantify performance. Analytics often favours data visualization to communicate insight.

2. What is Big Data?

Big data is a collection of data sets so large and complex that it becomes difficult to process using on-hand database management tools or traditional data processing applications. The challenges include capture, curation, storage, search, sharing, transfer, analysis, and visualization.



3. What is Big Data Analytics?

Big data analytics is the process of examining large amounts of data of a variety of types (Big Data) to uncover hidden patterns, unknown correlations and other useful information. Such information can provide competitive advantages over rival organizations and result in business benefits, such as more effective marketing and increased revenue.







4. What is the future of Data Analytics?

- According to Harvard Business Review, the Data Scientist is the 'Attractive Job of the 21st Century'.
- NASSCOM has estimated that from 50,000 today, the demand for Analytics professionals in India will grow to 2, 50,000.
- Analytics is the next big thing that is already starting to transform businesses and their ability to compete by helping them make smarter decisions. Analytics is the new career of choice for those who want to stay ahead. It is among the most well paid careers (it is also among the well-paid first-jobs). Companies are now beginning to create an extremely important new position called the Chief Analytics Officer! Analytics is one of the best career options today and those who invest in it will be on the fast track to success. And the right time is NOW.

A career in Analytics requires knowledge and skills from an extremely diverse set of fields: mathematics, statistics, economics, econometrics, IT, marketing, finance, HR, domain knowledge and of course a set of software tools. This means that while almost anyone with an interest in numbers can get in, everyone needs some training. Analytics is not so much about tools or technologies, it is a way of thinking that allows the use of knowledge, tools and technologies to extract valuable insights from data. Following key skill-sets are important for a successful career in,

- Basic Data Querying (SQL, Excel)
- Computing skills (Hadoop , Python)
- Statistical Packages ("R", SAS)
- Visualization
- Business skills

5. Who will provide the Academic Degree or Certificate?

Jain University (declared as Deemed-to-be University u/s 3 of the UGC Act, 1956) will award the Bachelor's as well as the Master's Degree. Jain University has been awarded the prestigious ISO 9001:2008 certification by TÜV Rheinland and it is also Member of the Association of Indian Universities (AIU) as well as Association of Universities of Asia & Pacific (AUAP)



6. Are there any prerequisites to attend this programme?

Programming experience and exposure with data related work such as Reporting, Data Integration, Database Management etc. are desirable. Mathematics / Business Mathematics / Statistics and/or basic Computer Skills are essential.







7. What is the job description of Data Analysts?

The Data Analysts job description frequently includes

- Importing, cleaning, transforming, validating or modeling data with the purpose of understanding or making conclusions from the data for decision making purposes.
- Presenting data in charts, graphs, tables, designing and developing relational databases for collecting data. In many cases this includes designing or presenting conclusions gained from analyzing data using statistical tools like Microsoft Excel, R, SAS, SPSS and others.
- In some organizations, it also includes building or designing data input or data collection screens. Data Analysts, in some cases, may have to write Data Definition Language or Data Manipulation Language SQL commands, be responsible for improving data quality.
- Data Analysts work in diverse domains including Banking, Financial Services, Insurance, Healthcare or social sciences.
- Some Data Analysts have backgrounds in technology, information management, relational database design and development, business intelligence, data mining or statistics.

8. What's special about JU programme on Data Analytics?

The JU Programme, designed by our Industry Partners - Pelican Brown, based out of Singapore, blends all the key skills of data querying and computation, statistics and statistical packages, business competency and presentation skills to create well-rounded analytics professionals for the industry. In-depth knowledge of select key domains of Banking, Financial, Services, Insurance (BSFI) and Healthcare are provided along with real-world business problems. It has been designed by experts with inputs from several leading organizations in the BFSI and Healthcare sector. It is delivered by the practitioners who have rich experience of having worked for some of the best analytics firms and Fortune 500 clients. And, the programme uses a case-based approach to learning.

9. What tools/software are taught in this courses?

Hadoop, Mapreduce, Pig, Hive, Neo4j, Casandra, MongoDB, HBase, Python, R, Advance Excel.





10. Is the course conceptual or hands-on?

The programme has been designed based on the inputs of some of the leading analytics firms and is a balance between concepts and hands-on practice. There are intensive assignments, case-studies and projects.







11. Does JU provide placement assistance?

YES, in conjunction with the Industry Partners, who currently work with the IT sector that employs a large cross-section and IT and Data Analytics resources.

12. What is the Curriculum?

Refer to the Curriculum.

13. What is the eligibility for this programme?

Refer to the Eligibility.

14. What are some of the job profiles at the entry level in Analytics?

- 1. Business Analyst
- 2. Data Analyst
- Data Scientist
- 4. Data Administrator

15. Who are some of the major employers in Analytics?

There are mainly FIVE types of employers:

- 1. Large IT companies who have an Analytics practice
- 2. Analytics KPOs
- 3. In-House Analytics Units of large Corporates
- 4. Niche Analytics firms
- 5. Marketing teams in most organizations

16. What are the average starting salaries in this field?

Between INR 5, 00,000/- and 7, 00,000/- per annum.

17. What is the duration of the programme?

BCA is a 3 years programme offered with specialization in Data Analytics.

18. How will the programme be delivered? / When will the classes be held?

BCA will be delivered at School of Graduate Studies, Jain University Campus.

Classes are held between 8.30 am - 4.00 pm (Mon - Fri) & 8.30 am - 2.30 pm (Sat).

19. How many hours of classes every week?

34 hours per week.







20. Is this a theory oriented programme or are will there also be practicals?

This programme has been designed using inputs from the industry and includes a balance between concepts and practical, hands-on skills. Throughout the programme there are extensive assignments, cases and projects which ensure that learners pick up the requisite concepts and skills.

21. Do I need to know programming to enroll into this programme?

No. Programming is not required as a pre-requisite. However, those who are familiar with programming will be able to use it to their advantage. Note that you will be learning Programming in various data analytics related programming languages as part of the programme.

22. Is there an admission test to qualify for the programme?

Yes, there is an admission test which checks for mathematical and numerical ability.

23. I have no IT experience. Is this programme for me?

IT experience is not necessary for this programme.



24. What kind of companies are going to hire me?

Business Analytics is the buzzword of the day. All large organizations are interested in utilizing Analytics in advancing their businesses. The programme will offer you competitive advantage in your current job or can help you switch careers to analytics.

25. I have 5/10/15 years of experience in Insurance or Banking or Telecom or Supply Chain Industry after this programme do I start as a beginner in Business Analytics?

Your knowledge about analytics along with your domain knowledge (banking, telecom, insurance, etc.) as well as your functional knowledge in marketing, finance, HR, supply chain, etc. are all valued and will give you a competitive advantage.







26. What kind of jobs am I likely to get after this course?

Almost all the large corporations need analytics professionals. You can be hired in your own industry at entry/mid/senior level depending upon your experience and the training you have had. IT companies, largely with Analytics assignments hire people to work on client projects which cut across functional and vertical domains. If you have no prior work experience, your best option is to join one of these.

27. Isn't that most of the work in analytics is done in western countries? What is the scope in India?

Like every major paradigm shift in the past (ERP, CRM, BPO, BSC, 6 sigma etc.), Business Analytics also came as a big wave from western world, mostly US and Europe. However, like everything else, most of the work eventually gets outsourced to India and for that, Indian companies require trained resources in large numbers. Also Indian companies have started adopting analytics (like with other concepts/technologies in the past). With training in analytics, you will be already few steps ahead and ready to grab the opportunity.

28. Who will be teaching the programmes?

A mix of academic and industry experts, people who have worked on large analytics projects for Fortune 500 companies in retail, media, telecom, banking, insurance etc. across the globe and taught at some of the premier institutes in India and abroad.

29. Are you going to teach SAS and SSPS as part of this course?

No, not as a part of this programme. However, you will get an overview of these packages so that as an analytics professional, you learn to appreciate what you can expect from the various statistical packages. Also, considering the requirements & interests evinced by the students, we offer these topics as value-add programmes as additional offerings during the courses.

30. How is it different from learning Business Analytics?

Business Analytics has two parts functional and technical. Business Analytics is the functional aspect of Big Data whereas Hadoop and Map Reduce form the technical aspect. We are teaching both Business context and the technical aspects in our course, so you will get the best of both worlds.

31. Who can do this course? What background do I need?

For BCA: 10+2/PUC/Intermediate with Mathematics/Computer Science as one core subject.







32. Where can I get the Admission Application form for admission?

Online: http://jainuniversity.ac.in/How-to-apply-BCA-sp.htm

Offline: The application forms are available at

Jain University - Admissions Office

JGI Knowledge Campus, Jayanagar 9th block Bangalore - 560 069

Ph: +91 99163 91234 / 98867 39337

Counselling session centers:

1. V V Puram Campus

#91/2, Dr. A N Krishna Rao Road V V Puram, Bangalore

P: +91 80 4343 1000

Ph: +91 99163 91234 / 98867 39337

2. J C Road Campus

#34, 1st Cross, JC Road, Bangalore

P: +91 80 4343 0100

Ph: +91 99163 91234 / 98867 39337

3. Jayanagar Campus

JGI Knowledge Campus, Jayanagar 9th block,

Bangalore - 560 069 P: +91 80 4343 0938

33. What documents are required at the time of BCA admission in JU?

- Attested copy of marks sheet of the eligible qualification 12th Standard or PUC / Graduation
- · Date of birth confirmation by SSLC marks card / Date of Birth Certificate, duly attested
- Migration certificate, as & where applicable.
- Copy of caste certificate (if applicable)







34. How to submit?

Online Admission Process:

- Last date to apply online with required documents will be 10 days from the PUC / ISC / CBSE examination results
- Admission Application forms will be processed within 3 working days
- Commencement of Provisional Admissions for PU / ISC / CBSE / Other board candidates securing 65% & above
- All selected candidates will be intimated via email of their selection through a
 Provisional Admission Offer Letter. Details regarding payment of fees, payment
 mode, Admissions Acceptance Form (Annexure) will be specified in the Admission
 Offer Letter. Candidates are encouraged to read the document carefully.
- On acceptance of the admission offer, the candidate should pay the prescribed fees to Jain University through internet banking or card payment mode online or cash payment through e-challan
- The candidate is required to fill the Admission Acceptance Form containing fee remittance details. Scanned copy of the receipt and admission acceptance form should be sent to fees.sgs@jainuniversity.ac.in / admissions@pelicanbrown.com
- Offer of admission will be valid only for the specific programme opted by the candidate as well as for the same academic session. Admission may be given provisionally as may be specified in the letter. The offer of admission will automatically stand cancelled if the conditions are not fulfilled by the specified time.
- Failure to pay the stipulated fee within the specified date or failure to report for classes
 as per the university commencement date will entail cancellation of admission as per
 the university cancellation policy.

Offline Admission Process:

- Admission Office for this programme shall be Jain University, JGI Knowledge Campus, Jayanagar 9th Block, Bangalore - 560 069
- Upon submission, the application will be processed by the Admissions Office, Jain University, JGI Knowledge Campus, Jayanagar 9th Block and Admission to BCA Specialisation programme commences as per the Admission Calendar displayed on the Jain University website / campus notice board.
- Selected candidates will be issued Provisional Admission Offer Letter. Details regarding payment of fees, payment mode, Admissions Acceptance Form (Annexure) will be specified in the Admission Offer Letter. Candidates are encouraged to read the document carefully.
- On acceptance of the admission offer, the candidate should pay the prescribed fees to Jain University through internet banking or card payment mode online or cash payment through e-challan.







- The candidate is required to complete and submit the Admission Acceptance Form containing fee remittance details and along with receipt to the Admissions Office
- Offer of admission will be valid only for the specific programme opted by the candidate
 as well as for the same academic session. Admission may be given provisionally as
 may be specified in the letter. The offer of admission will automatically stand cancelled
 if the conditions are not fulfilled by the specified time.
- Failure to pay the stipulated fee within the specified date or failure to report for classes as per the university commencement date will entail cancellation of admission as per the university cancellation policy.

35. What is the Fee Structure of the course?

Domestic Candidates

Overseas Candidates

Will be decided on the basis of country of origin & applicable norms / levy as advised by the International Admission Cell, JU from time to time.

36. Does JU provide Financial Assistance and scholarship to deserving students?

No, JU will not provide any financial assistance. However, students willing to apply for government scholarships will be assisted.

37. Is there an application fee?

Yes. The application fee is INR 550, Kindly contact the Student Counselors, Admission Teams or visit the JU / Pelican Brown for details / collecting Prescribed Application Programmes.

38. Can you waive the application fee for me?

Application fee cannot be waived.

39. Loan facility if any?

For deserving aspirants in fulfilling their dreams, Jain University has tied up with EduConsult to offer education loan facility.

EduConsult - A basket option Initiative is a financial services company incubated by JGI Ventures Pvt. Ltd.

For more details, visit the website www.basketoption.com

40. What is the selection process for the programme?

Screening, Entrance exam (to know aptitude and IT skills), Face to face Interview. (Note: Any candidates found to be weak in technical skills, will be asked to undergo Bridge course)







41. Are these courses approved by any regulatory body?

As a deemed university, JU is empowered to run all courses as per UGC guidelines.

42. Can we go for MBA/MCA after B.C.A?

Yes

43. What kind of PG courses I can join after BCA?

Most of the MSc / PG courses would be valid, as applicable for another bachelor's course programmes. A further specialization in Data Analytics will allow you to take up the higher order Data Scientist roles.

44. What are the different courses being offered by the Institute?

Jain University offers a wide range of Undergraduate, Postgraduate and Research Programmes.

45. How is this course different from regular/other BCA?

This course prepares you for a specialized career in Data Analytics/Data Science, whereas the General BCA is just the fundamental / overall traditional course programme. Normal BCA graduates may require a PG Specialization to enter IT industry, whereas our course opens the doors of the market immediately.

46. What are the total number of seats for BCA course?

BCA - 60

47. What about the curricula?

Industry specific design by the Industry Partners - Pelican Brown, Singapore. Approved by Jain University Board of Studies/ Approved by Jain University academic council, under UGC guidelines.

48. Are the Courses approved by the All India Council for Technical Education (AICTE)?

No, this course does not come under the purview of AICTE.

49. Is this course is recognized?

Yes, UGC Guideline compliant programmes.







50. How is this course different from other universities?

Industry specific run in partnership with Industry Partners from Singapore. Key difference is in the blending of business and technical skills that will create real-word Business Data Analysts / Scientists and the connect with the industry to get attractive career placements, on successful completion of the courses

51. What is level of this course?

BCA is an Undergraduate programme.

52. Will the course give me credits towards a degree or some other study?

No, there are no credits for time being. However, the course clearly positions you to get several industry-recognized certifications that expand your job opportunities beyond just technology and data Analytics. Some of the certifications are CISI (several), CFA (level 1), and LOMA (ALMI) etc.

53. Who will benefit from this course?

10+2 / Inter / PUC students can enter this professional course.

54. What are the unique advantages of the programme?

Industry specific run by knowledge partners from Singapore.

55. Are the syllabi at par with International Standards?

Yes, most of our subjects are in par with International certifications like CFA, LOMA, PMP, ITIL, IBAP, etc.

56. Will there be any programming in the course?

Yes for BCA, you will familiarize with programming skills.

57. How much of the course is devoted to hands-on exercises?

25% hands-on / 2 practical subjects in all semesters.

58. Whether institute is offering laptop?

MSc (IT) Specilisation in Data Analytics candidates will get Laptop (BCAs will get it at the bargained costs).

59. What are the Hostel & Transportation Charges?

The Jain University Hostels, located across South Bangalore are preferred residential option for students. Separate spacious accommodation is provided for boys & girls with food, laundry and recreational facilities. Supervision by designated Wardens, hygiene, safety, kitchen facilities, medical check-up, medical insurance, telephones and state-of-the art gymnasium are just some of the other amenities.







60. What are the facilities at campus?

- Induction & Orientation Service
- IT Services
- Technology Enabled Classrooms
- Internet
- Accommodation/Hostels
- Gymnasium
- Auditorium
- Multi-Cuisine Cafeteria
- Career Development Centre
- Student Counselling Centre
- Financial Aid
- Services for the SC/ST students

- Service to differently-abled
- Women's Cell
- Anti-Sexual Harassment Cell
- Student Grievance Redressal Cell
- Indoor stadium
- Swimming pool
- Cricket Ground
- Tennis courts
- Basketball court
- Golf course
- Football court
- Hockey court

61. Is Internet facility available to students?

Yes, PG Students can access the internet and UG students can access only on need.

62. Are text books provided to students?

No, list of reference books will be mentioned in the syllabus and copies of same will be available in the Library.

63. How good are the computing infrastructure and other services in your institute?

Yes, JU has excellent IT Infrastructure.

64. What are international linkages of JU?

- 1. Jain University has been awarded the prestigious ISO 9001:2008 certification by TÜV Rheinland. The scope of the ISO Certification includes "Design and Development of Course Curriculum, Conduct of Examinations, Management of Evaluation Process, Award of Degree Certificates, Management of Programme delivery at Undergraduate, Postgraduate and M.Phil. / Ph.D. / other Research Programmes at constituent Schools and Research Centers as per UGC regulations".
- 2. Jain University is a member of the Association of Indian Universities (AIU).
- 3. Jain University is a member of Association of Universities of Asia and the Pacific (AUAP).







65. How is the Placement of the Institute?

JU has a very good track record of placement.

66. What types of jobs offered to JU Students?

Students can join the industry as Data Analysts, Business Analysts or Data Science professional.

67. Give us some information about JU?

Jain University is promoted by the Jain University Trust. The Jain University Trust is managed by the JGI Group. Headquartered at Bangalore, the JGI Group represents a cluster of 85 vibrant educational establishments. After 23 years, the Group is today caters to over 45,000 students and 4,500 staff members engaged at the Pre School - XII , Undergraduate, Postgraduate & Research levels across 64 campuses and Centre of Excellence.

Jain University (formerly Sri Bhagwan Mahaveer Jain College, SBMJC) is declared deemed-to-be University under section 3 of the UGC act, 1956 by the Ministry of Human Resource Development of the Union Government vide notification No.F-9-57/2007-U.3 (A) Ministry of HRD, GOI December 19, 2008 & July 24, 2009. Jain University brings in thought leadership with a blend of academic rigour and a hands-on applicability to real-world issues. The learning environment is enriched by a team of highly talented & motivated faculty and staff, and an illustrious leadership.

The University currently offers over 100 innovative programmes at the Undergraduate, Postgraduate and Research levels. At Jain University undergraduate & postgraduate aspirants have an opportunity to fulfill education requirements, choose among a wide variety of elective courses and interdisciplinary certificate programmes and be a part of research activities undertaken by the university in diverse fields. The university offers degrees spanning Languages, Social Sciences & Humanities, Physical & Life Sciences, Engineering Science and Technology, Management and Commerce.

68. Which courses are offered by Faculty of Computer Science/IT?UG, PG including PhD Programmes.

69. Is the JU a member of the Association of Indian Universities (AIU)? Yes







24. Gulf Oil Corporation

Frequently Asked Questions (FAQ's)

70. Are these co-educational institutions?

Yes

71. Is there any uniform?

No

1. Accenture

72. Who are the past industry recruiters for your course

1. Accenture	24. Guil Oil Corporation
2. Arihant Capital Markets	25. <u>HDFC</u>
3. Artha Money (Times Group)	26. <u>HDFC</u> - AMC
4. Astra Zeneca	27. <u>HP</u>
5. <u>AXA</u>	28. <u>IBM</u>
6. <u>Bajaj Allianz</u>	29. ICICI Bank
7. Bajaj Capital	30. ICICI Ventures
8. Basket Options	31. <u>IL&FS Investment</u>
9. <u>Biocon</u>	32. <u>Infosys</u>
10. <u>BOSE</u>	33. <u>Infosys</u> BPO / KPO
11. BS Talent Solution	34. <u>ING Vysya Bank</u>
12. Cognizant Technology Solutions	35. <u>JP Morgan</u>
13. DE Shaw	36. Kotak Securities
14. <u>DELL</u>	37. <u>KPMG</u>
15. DEN Networks	38. LIC Housing Finance & Mutual Fund
16. DSP Merrill Lynch	39. Mind Tree
17. Ernst & Young Global and India	40. NJ India
18. Fidelity	41. <u>Patni</u>
19. Fortune Informatics	42. <u>RBS</u>
20. Futures First	43. Religare
21. Glaxo Smithline	44. SLK Software
22. Goldman Sachs India Pvt. Ltd.	45. <u>Target</u>
23. Google	46. Tech Mahindra



