About Intellipaat

Intellipaat is a fast-growing professional training provider that is offering training in over 150 most sought-after tools and technologies. We have a learner base of 600,000 in over 32 countries and growing. For job assistance and placement we have direct tie-ups with 80+ MNCs.

Key Features of Intellipaat Training:

<table>
<thead>
<tr>
<th>Instructor Led Training</th>
<th>Self-Paced Training</th>
<th>Exercise and project work</th>
<th>Lifetime Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 Hrs of highly interactive instructor led training</td>
<td>30 Hrs of Self-Paced sessions with Lifetime access</td>
<td>60 Hrs of real-time projects after every module</td>
<td>Lifetime access and free upgrade to latest version</td>
</tr>
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<table>
<thead>
<tr>
<th>Support</th>
<th>Get Certified</th>
<th>Job Assistance</th>
<th>Flexi Scheduling</th>
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<tbody>
<tr>
<td>Lifetime 24*7 technical support and query resolution</td>
<td>Get global industry recognized certifications</td>
<td>Job assistance through 80+ corporate tie-ups</td>
<td>Attend multiple batches for lifetime &amp; stay updated.</td>
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About the Course

This MSBI certification training provides you with all the skills needed to work with the Microsoft Business Intelligence stack. You will get proficiency in SQL Server, Analysis, Integration, and Reporting. This training will provide you with enough knowledge about Data Warehousing, ETL Solutions, Connecting Managers, Transformations and other operations.

Instructor Led
Duration – 30 Hrs
Weekend Batch – 3 Hrs/Session

Self Paced
Duration- 30Hrs
Why take this Course?

Today the demand for SQL Server Business Intelligence professionals is increasing and there is a real need for expertise in SSAS, SSIS, and SSRS. Hence with this tutorial, you can take up the highly coveted Microsoft BI jobs and pass the MCSE: Business Intelligence Certification for a great future.

❖ 75% of Companies are Investing or Planning to Invest in Big Data by 2017 – Gartner
❖ Global BI and Analytics Market to Reach $16.9 Billion in 2016 – Gartner
❖ Average US Salary for a Microsoft BI professional is $ 107,000 – indeed.com

Course Content

MSBI SSIS Course Content:

<table>
<thead>
<tr>
<th>Module /Topic</th>
<th>MSBI SSIS Course Content</th>
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</thead>
</table>
| What is BI?   | ❖ Introduction to Business Intelligence  
❖ Understanding the concept of Data Modeling, Data Cleaning  
❖ Learning about Data Analysis  
❖ Data Representation and Data Transformation |
| ETL Overview  | ❖ Introduction to ETL  
❖ The various steps involved Extract, Transform, Load, using a user’s email ID to read a flat file  
❖ Extracting the User ID from email ID  
❖ Loading the data into a database table |
| Working with Connection Managers | ❖ Introduction to Connection Managers – logical representation of a connection  
❖ The various types of Connection Managers – Flat file, database  
❖ Understanding how to load faster with OLE DB  
❖ Comparing the performance of OLE DB and ADO.net  
❖ Learning about Bulk Insert  
❖ Working with Excel Connection Managers and identifying the problems |
<table>
<thead>
<tr>
<th>Data transformations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning what is Data Transformation</td>
</tr>
<tr>
<td>Converting data from one format to another</td>
</tr>
<tr>
<td>Understanding the concepts of Character Map</td>
</tr>
<tr>
<td>Data Column and Copy Column Transformation</td>
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<tr>
<td>Import and export column transformation</td>
</tr>
<tr>
<td>Script and OLEDB Command Transformation</td>
</tr>
<tr>
<td>Understanding row sampling, aggregate and sort transformation</td>
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<tr>
<td>Percentage and row sampling</td>
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</table>

<table>
<thead>
<tr>
<th>Advance Data Transformation</th>
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<tbody>
<tr>
<td>Understanding Pivot and UnPivot Transformation</td>
</tr>
<tr>
<td>Understanding Audit and Row Count Transformation</td>
</tr>
<tr>
<td>Working with Split and Join Transformation</td>
</tr>
<tr>
<td>Studying Lookup and Cache Transformation</td>
</tr>
<tr>
<td>Integrating with Azure Analysis Services</td>
</tr>
<tr>
<td>Elastic nature of MSBI to integrate with the Azure cloud service</td>
</tr>
<tr>
<td>Scale-out deployment option for MSBI, working with cloud-borne data sources and query analysis</td>
</tr>
<tr>
<td>Scaling out the SSIS package, deploying for tighter windows</td>
</tr>
<tr>
<td>Working with a larger amount of data sources</td>
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<tr>
<td>SQL Server vNext for enhancing SQL Server features</td>
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<tr>
<td>More choice of development languages and data types both on-premise and in the cloud</td>
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<tr>
<th>Slowly Changing Dimensions</th>
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<tbody>
<tr>
<td>Understanding data that slowly changes over time</td>
</tr>
<tr>
<td>Learning the process of how new data is written over old data, best practices</td>
</tr>
<tr>
<td>Detail explanation of three types of SCDs –Type1, Type2 and Type3, and their differences</td>
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<table>
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<tr>
<th>Overview of Fuzzy Look-up Transformation and Lookup and Term Extraction</th>
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<tbody>
<tr>
<td>Understanding how Fuzzy Lookup Transformation varies from Lookup Transformation</td>
</tr>
<tr>
<td>The concept of Fuzzy matching</td>
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</table>
### Concepts of Logging & Configuration
- Learning about error rows configuration, package logging
- Defining package configuration
- Understanding constraints and event handlers

### MSBI SSRS Course Content

<table>
<thead>
<tr>
<th>Module /Topic</th>
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</table>
| **Introduction to SSRS** | Get introduced to the SSRS Architecture  
|                       | Components of SSRS Report Building tool  
|                       | Learning about the data flow in different components  |
| **Matrix and Tablix Overview** | Understanding the concepts of Matrix and Tablix,  
|                       | Working with Text Box  
|                       | Learning about formatting, row/column grouping  
|                       | Understanding sorting, formatting, concepts of Header, Footer, Totals, Subtotals and Page Breaks  |
| **Parameters and Expression** | Learning about Parameters, filter and visibility expression  
|                       | Understanding drill-through and drill-down  
|                       | Defining variables, custom code  |
| **Reports and Charts Creation** | Introduction to various aspects of Bar Chart, Line Chart  
|                       | Combination Chart, Shape Chart, Sub Reports  
|                       | Integration of Power Query and M language with SSRS  
|                       | Working with additional data sources in MSBI  
|                       | Rich transformation capabilities addition to MSBI  
|                       | Reusing M functions build for PBIX in SSRS  |
## Dashboard Building

- Learn how to build a Dashboard with Sparklines, Data Bars, Map Charts
- Gauge Charts and drilling into reports, the basics of ad hoc reporting
- Data Bar, Sparkline, Indicator, Gauge Chart, Map Chart, Report Drilling
- What is Ad-hoc reporting?

## Reports and Authenticity

- Understanding Report Cache
- Authorization, Authentication and Report Snapshot
- Learning about Subscriptions and Site Security

## MSBI SSAS Course Content

### Module /Topic | Hands-on exercises
---|---
### Getting Started with SSAS

- Understanding the concept of multidimensional analysis
- Understanding SSAS Architecture and benefits
- Learn what is Cube
- Working with Tables and OLAP databases
- Understanding the concept of Data Sources, working with Dimension Wizard
- Understanding Dimension Structure, Attribute Relationships
- Flexible and rigid relationship

### Structures and Processes

- Learning about Process Dimension
- The Process database, the creation of Cube
- Understanding Cube Structure, Cube browsing
- Defining the various categories
- Product Key and Customer Key
- Column Naming
- Processing and deploying a Cube, Report creation with a Cube

- Create a Cube and name various columns
- Deploy a cube after applying keys and other rules
- Create reports with a cube
### Types of Database Relationship

- Understanding Data Dimensions and its importance
- The various relationships, regular, referenced, many to many, fact, working on Data Partitions, and Data Aggregations

### SSAS Cube

- Learning about SSAS Cube, the various types of Cubes
- The scope of Cube and comparison with Data Warehouse

### Cube: Operations and Limitations

- The various operations on Cube
- The limitations of OLAP Cubes
- The architecture of in-memory analytics and its advantages

### Cube and in-memory Analytics

- Deploying cube with existing data warehouse capabilities to get self-service business intelligence
- Understanding how in-memory analytics works

### Data Source View

- Logical model of the schema used by the Cube, components of Cube
- Understanding Named Queries and Relationships

### Dimensions

- An overview of the Dimensions concept
- Describing the Attributes and Attributes Hierarchies
- Understanding Key/Value Pairs
- Metadata Reload, logical keys and role-based dimensions

- Deploy cube to get self-service business intelligence
- Create role based dimensions, Use Attributes Hierarchies
### Measures & Features of Cube
- Understanding the Measure of Cube
- Analyzing the Measure
- Exploring the relationship between Measure and Measure Group
- Cube features and Dimension usage

### Measures and features of Cube cont.
- Working with Cube Measures
- Deploying analytics
- Understanding the Key Performance Indicators
- Deploying actions and drill-through actions on data
- Working on data partitions, aggregations, translations and perspectives

### Working with MDX
- Understanding Multidimensional Expressions language
- Working with MDX queries for data retrieval
- Working with Clause, Set, Tuple, Filter condition in MDX

### Functions of MDX
- Learning about MDX hierarchies
- The functions used in MDX, Ancestor, Ascendant and Descendant function
- Performing data ordering

### DAX Languages
- Data Analysis Expressions (DAX)
- Using the EVALUATE and CALCULATE functions
- Filter DAX queries
- Create calculated measures
- Perform data analysis by using DAX

### BI Semantic Model
- Designing and publishing a tabular data model
- Designing measures relationships

- Work with Cube Measures, Deploy analytics
- Deploy actions and drill-through actions on data, Make data partitions

- Apply Clause, Set and filter condition in MDX query to retrieve data

- Create MDX hierarchies
- Perform data order in ascending order, in descending order

- Use the EVALUATE and CALCULATE functions, filter DAX queries, create calculated measures, perform data analysis by using DAX

- Design and publish a tabular data model
- Design measures relationships, hierarchies,
Project Work

Project 1: Configuration and Logging

Industry: General

Problem Statement: How to integrate data from multiple sources into the SQL Server

Topics: In this SQL Server Integration Services (SSIS) project you will extensively work on multiple data from the heterogeneous source into SQL Server. As part of the project, you will learn to clean and standardize data and automate the administrative work. Some of the tasks that you will be performing are adding logs to SSIS package, configuration and saving it to an XML file. Upon completion of the project, you will have hands-on experience in handling constraints, error row configuration, and event handlers.
Highlight:

❖ Integrate data from heterogeneous sources
❖ Working with Connection Manager
❖ Deploying data modeling

Project 2: SSAS Cube Using BI Data Tools 2012

Industry: Sales

Problem Statement: How to create the SSAS Cubes for faster reporting

Topics – In this project, you will be work on a large volume of data and use it for creating reports and dashboards for sales performance in order to derive valuable insights. You will deploy the sales database in SQL server and build SSAS Cubes. Upon completion of the project, you will be well-versed to work in a real-world business scenario to analyze various parameters and instances in order to derive business insights.

Highlights:

❖ Create multidimensional cubes
❖ Deploying MDX query language
❖ Working with in-memory analytics

Project 3: Building Dashboard

Data: Sales

Topics: In this project, you will be working on SQL Server Reporting Services (SSRS) and deploying it for building dashboards in a business environment. The Business Intelligence Report that you create will be used to calculate sales based on the years and currencies that you choose. Some of the tasks that you will be performing as part of this project are – design and create Gauge and Map Charts, Spark lines and Data Bar and perform drill-through Reports, and ad hoc Reporting.

Project 4: Analyzing the Retails Sales Data

Industry: Retail

Problem Statement: Improving the business revenue of a retail enterprise by minutely analyzing the data regarding products, customers, sales and coming up with business insights.
Description: This project first consolidates all the data from multiple data sources like SQL Server, Oracle, and DB2 among others. This data is then processed using the OLAP capabilities of Microsoft Business Intelligence or MSBI tool.

Highlights:
- Load data into the data warehouse using SSIS
- Build OLAP cubes using SSAS
- Generate report, analyze & present SSRS

Project 5: Working with data warehouse and generating reports

Industry: Manufacturing

Problem Statement: A manufacturing company wants to parse the data from enterprise data warehouse and create insightful reports.

Description: In this project, you will extract the data periodically from the enterprise data warehouse. You will work with applications that support business processes, and you will validate, reformat, reorganize, summarize and restructure the data and load it into the enterprise data warehouse. This data is then taken for report generation, analysis and presentation through ad hoc reporting and dashboard creation.

Highlights:
- Load data into the data warehouse using SSIS
- Build OLAP cubes using SSAS for data analysis
- Generate Reports using SSRS for data visualization

Project 6: E-commerce Company wants to improve sales

Industry: E-commerce

Problem Statement: Using the MSBI tool for improving sales by closely analyzing the products, sales, regions and other parameters

Description: In this project, you will design and build a data warehouse to track sales information for all the regions. You will create powerful reports for understanding the data and take informed decisions. The dataset has information regarding products, sales, customers, regions, profit margin and so on.

Highlights:
- Integrate data in a data warehouse using SSIS
- Analyze customers, regions using SSAS
- Report the data through dashboards using SSRS
Intellipaat Job Assistance Program

Intellipaat is offering comprehensive job assistance to all the learners who have successfully completed the training. A learner will be considered to have successfully completed the training if he/she finishes all the exercises, case studies, projects and gets a minimum of 60% marks in the Intellipaat qualifying exam.

Intellipaat has exclusive tie-ups with over 80 MNCs for placement. All the resumes of eligible candidates will be forwarded to the Intellipaat job assistance partners. Once there is a relevant opening in any of the companies, you will get a call directly for the job interview from that particular company.

Frequently Asked Questions:

Q 1. What is the criterion for availing the Intellipaat job assistance program?
Ans. All Intellipaat learners who have successfully completed the training post April 2017 are directly eligible for the Intellipaat job assistance program.

Q 2. Which are the companies that I can get placed in?
Ans. We have exclusive tie-ups with MNCs like Ericsson, Cisco, Cognizant, Sony, Mu Sigma, Saint-Gobain, Standard Chartered, TCS, Genpact, Hexaware, and more. So you have the opportunity to get placed in these top global companies.

Q 3. Does Intellipaat help learners to crack the job interviews?
Ans. Intellipaat has an exclusive section which includes the top interview questions asked in top MNCs for most of the technologies and tools for which we provide training. Other than that our support and technical team can also help you in this regard.

Q 4. Do I need to have prior industry experience for getting an interview call?
Ans. There is no need to have any prior industry experience for getting an interview call. In fact, the successful completion of the Intellipaat certification training is equivalent to six months of industry experience. This is definitely an added advantage when you are attending an interview.

Q 5. What is the job location that I will get?
Ans. Intellipaat will try to get you a job in your same location provided such a vacancy exists in that location.
Q 6. Which is the domain that I will get placed in?
Ans. Depending on the Intellipaat certification training you have successfully completed, you will be placed in the same domain.

Q 7. Is there any fee for the Intellipaat placement assistance?
Ans. Intellipaat does not charge any fees as part of the placement assistance program.

Q 8. If I don’t get a job in the first attempt, can I get another chance?
Ans. Definitely, yes. Your resume will be in our database and we will circulate it to our MNC partners until you get a job. So there is no upper limit to the number of job interviews you can attend.

Q 9. Does Intellipaat guarantee a job through its job assistance program?
Ans. Intellipaat does not guarantee any job through the job assistance program. However, we will definitely offer you full assistance by circulating your resume among our affiliate partners.

Q 10. What is the salary that I will be getting once I get the job?
Ans. Your salary will be directly commensurate with your abilities and the prevailing industry standards.

What makes us who we are?

“I really loved the quality of video that came with the Intellipaat MSBI training. Since I had enrolled for the self-paced training the quality of video is really crucial and Intellipaat did a really good job of delivering what they promised.”

-Omar Shaheb
“My Intellipaat training in MSBI was a very good career decision. It helped me upskill and master one of the top business intelligence tool and Intellipaat is the key to my success.”

-Gokhan Dedegolu

“The Intellipaat MSBI training was outstanding. The wide variety and rich quality of the training material, the videos, ppts and pdfs that accompanied the training were really good and helped me master this technology.”

-Ayush Gupta