



**YOUR TEAM PLAYER**  
ONSITE EDUCATION SERVICES



## Your Team Player Course Summary

#151 - SAS Programming Fast Track

### **YourTeamPlayer**

-

Admin

#### **This document contains:**

Welcome to the team

Course Topics

Course Logistics

Terms and Conditions

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1300 340 098 or (Mobile) 0408 054 893  
info@yourteamplayer.com



Thank you for visiting TeamPlayer onsite education website ([www.YourTeamPlayer.com](http://www.YourTeamPlayer.com)) and constructing your own customised course.

This proposal outlines your course topics and delivery details. Admin [info@yourteampayer.com](mailto:info@yourteampayer.com) can access these details at [www.YourTeamPlayer.com](http://www.YourTeamPlayer.com) at any time. From the website, you can make any changes you like, copy this course, create new ones and reproduce this document at your own discretion.

All our training offerings are designed to be conducted at your premises and can be entirely customised to use your own data and business scenarios. Our trainers are highly experienced professionals and have a broad range of practical experience.



## #151 - SAS Programming Fast Track

What name would you like to give to this course?

**#151 - SAS Programming Fast Track**

Your Name

**Admin**

Your Email Address

**info@yourteampayer.com**

Your Daytime phone number

**1300 340 098**

Approximate date(s) you would like to run this event

**-**

Approximate Number of Participants

**3**

Delivery Address

### **Computing and room facilities**

Where would you like to conduct this training event?

**We have a meeting room / Board room of an appropriate size**

What computer facilities would you like to use for this event?

**We would prefer to use our own computers and move them ourselves**

Do you have a SAS 9.2 computing environment we can use for this event?

**We can use our existing SAS 'Development or testing' environment**

### **Provision of Web based Pre requisite testing and summary analysis**

Please provide web based pre requisite testing and a resulting summary analysis for intended participants.

**No Thanks**

Please provide web based post-course testing and analysis

**No Thanks**



## Course Topics

<b>SAS® Programming - Basics</b>
<b><i>SAS® Programming Basics</i></b>  This topic covers all the basics of the SAS programming language to effectively extract and summarise data.  Students will not only learn SAS code syntax. They will understand how SAS processes and the logic behind turning a business problem into a code solution. Both non technical people and self taught SAS professionals have found the material here to be challenging and very insightful. Providing the ability to not just write basic SAS code, but confidently understanding what it is going on behind the scenes. <ul style="list-style-type: none"><li>• Program Data Vector, Program Compilation and Execution</li><li>• Basic SAS software procedures</li><li>• The basics of the data step</li><li>• If/Then logic in SAS software</li><li>• Functions and formats in SAS software</li><li>• Summarising data using SAS software procedures</li><li>• Merging, Concatenating and Joining data with SAS</li></ul>
<b><i>Proc SQL Basics</i></b>  The SQL procedure allows you to use ANSI standard SQL (Structured Query Language) to interrogate and manipulate any data source available to your SAS session. Proc SQL provides all the standard capabilities to query and summarise data that any Relational Database System (RDBMS) provides and much more. This topic is a basic introduction to SQL syntax. <ul style="list-style-type: none"><li>• Basic SQL syntax to produce a report or data table.</li><li>• Joining (merging) multiple tables with Proc SQL</li><li>• Basic data summarisation with Proc SQL</li></ul>
<b>SAS® Programming - Intermediate</b>
<b><i>SAS® Level 2 Controlling data flow in the Data Step</i></b> <ul style="list-style-type: none"><li>• Input and Output data manipulation in the Data step.</li><li>• Controlling multiple output destinations.</li><li>• Controlling multiple conditional passes of input data.</li><li>• Efficiency considerations for filtering incoming values and fields (observations and variables)</li><li>• Debugging techniques</li></ul>
<b><i>SAS® Level 2 Intermediate Data Step processing</i></b> <ul style="list-style-type: none"><li>• Using SAS functions and User written format lookups.</li><li>• Iterative loop processing.</li><li>• Controlling calculations within and outside loop processing</li><li>• Methods to test the logic and debug problems.</li></ul>
<b><i>SAS® Level 2 Accumulating totals within the Data step</i></b>  An invaluable capability to accumulate values as you read through a data source. Giving you the ability to provide frequency counters, conditionally applied calculations and accumulated totals for specific occurrences within your data source. <ul style="list-style-type: none"><li>• Controlling fields for accumulating numeric totals and conditional processing</li><li>• Accumulating data within groups (BY group processing) in the Data step</li><li>• Controlling text data accumulation</li><li>• SAS Array processing (optional)</li></ul>
<b><i>SAS® Level 2 Data Step Array processing</i></b> <ul style="list-style-type: none"><li>• Single and multi dimensional array processing explained with practical demonstration and an exercise</li></ul>
<b><i>SAS® Level 2 Data Summarisation &amp; Reporting Procedures</i></b> <ul style="list-style-type: none"><li>• Data summarisation and manipulation procedures (as appropriate for your need and environment)</li><li>• Proc Summary, SQL (basics), Tabulate, Report, Freq etc....</li><li>• Using formats to automatically summarise procedure output.</li></ul>



SAS® Programming - Macro

***SAS® Macros - Automatic Macros and Macros as parameters***

- Introduction to the SAS macro facility
- Automatic macros
- Macro references
- Text substitution with user defined macros
- Delimiting macro references

Total approximate delivery time based on selected topics: 5.00 Days.  
This estimate includes breaks and is based on a 7hr training day



## Terms and Conditions

### **Course Cost**

*An invoice for the full price of the course (excluding travel expenses) will be raised upon course confirmation and is payable before the course commencement date. If the instructor needs to travel from interstate, any further travel related expenses will be invoiced separately after course completion. These expenses will be under the levels set out in current [ATO rulings](#).*

### **Course Cancellation Policy**

*Cancellations up to 2 weeks prior to the event will be refunded in full. Any expenses incurred by TeamPlayer within 2 weeks of the event will be deducted from any refunded amounts. Any cancellations one business day prior or on the day of the event will not be refunded.*

### **What happens next**

*Upon booking your course. An invoice will be raised (excluding travel expenses) and sent to you via email along with a link to authorise our client services document online via EchoSign. The document has been specifically designed to provide you with assurances YourTeamPlayer respects your intellectual property, software licences, confidential information and so forth.*

*After we receive authorisation and payment. We will send you or the students a confirmation email containing all the course details and make all the necessary arrangements for your course.*