# A Hand Book of AUTOCAD

Mr. Vikky Kumhar

Director (CAD info) & Assistant Professor Mechanical Dept.

RSR Rungta College of Engineering & Technology

Bhilai, Chhattisgarh, INDIA.

### A HAND BOOK OF AUTOCAD

Copyright© : Mr. Vikky Kumhar

Publishing Rights (P) : VSRD Academic Publishing

A Division of Visual Soft India Pvt. Ltd.

ISBN-13: 978-93-86258-65-6

FIRST EDITION, AUGUST 2017, INDIA

Typeset, Printed & Published by:

# **VSRD Academic Publishing**

(A Division of Visual Soft India Pvt. Ltd.)

**Disclaimer:** The author(s) are solely responsible for the contents of the papers compiled in this book. The publishers or its staff do not take any responsibility for the same in any manner. Errors, if any, are purely unintentional and readers are requested to communicate such errors to the Editors or Publishers to avoid discrepancies in future.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photo-copying, recording or otherwise, without the prior permission of the Publishers & Author.

Printed & Bound in India

## **VSRD ACADEMIC PUBLISHING**

A Division of Visual Soft India Pvt. Ltd.

### **REGISTERED OFFICE**

154, Tezabmill Campus, Anwargani, KANPUR-208003 (UP) (IN)

Mb: 99561 27040, Web: www.vsrdpublishing.com, Email: vsrdpublishing@gmail.com

### MARKETING OFFICE (NORTH INDIA)

Basement-2, Villa-10, Block-V, Charmwood Village, FARIDABAD—121009 (HY)(IN) Mb: 98999 36803, Web: www.vsrdpublishing.com, Email: vsrdpublishing@gmail.com

# **MARKETING OFFICE (SOUTH INDIA)**

340, FF, Adarsh Nagar, Oshiwara, Andheri(W), MUMBAI–400053 (MH)(IN) Mb: 99561 27040, Web: www.vsrdpublishing.com, Email: vsrdpublishing@gmail.com

# **PREFACE**

This book provides a comprehensive study and concept clearing for ME/M.Tech/BE/B.Tech/Diploma/ITI students. It is usually observed that there is not even a single book available in the market which covers complete course on AutoCAD. An engineering student, a draftsman, an architect, a civil or mechanical engineering practitioner has to consult many books on the subject for performing his professional obligations.

It is our intent to give the students the best available latest information and concepts on the subject. The organization of the book is organized in such a way that it makes strong foundation and depth knowledge of AutoCAD. The main purpose of this book is to provide the beginners as well as high level students and professionals in the design field with a comprehensive knowledge of modern CAD.

To pace with technology changes, frequent updates with newer editions become a necessity, and we plan to make revisions every year in future. Valuable suggestions are always welcome for further improvement.

August 2017

Mr. Vikky Kumhar

# ACKNOWLEDGEMENT

I would like to thank people who guided and supported me during this process. Without their contributions, this work would not have been possible.

We would like to express a special note of gratitude to theediting team of **VSRD Academic Publishing** (A Division of Visual Soft India Private Limited) in releasing this book.

Last and definitely not the least, I express my deep sense of appreciation to *My Family Members: Father, Mother, Brother, Wife and Friends* for their support, cooperation and patience during the completion of my book.

August 2017

Mr. Vikky Kumhar

# **CONTENTS**

1.	INTRODUCTION	1
1.1	Overview	1
1.2	AutoCAD Interface	
1.3	Creating Basic Drawings	3
1.4	Drawing Units	5
1.5	Cursers	5
1.6	Select/ Deselect	
2.	DRAWING USING AUTOCAD	
2.1	Creating Basic Objects	
3.	EDITING VIEWING DRAWING	
3.1	Selection Tool	
3.2		
3.3	3 - 3 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	24
3.4	0 0 1	
3.5	Matching Object Properties	
4.	DIMENSIONING AND UTILITY	
4.1	Annotating the Drawings	
4.2	0 0222020	
4.3	View	
5.	ISOMETRIC DRAWING	
5.1	Introduction and Creation	
6.	SOLID MODELLING	
6.1	Introduction	
6.2	3D Modelling Interface	
6.3	Primitives	
6.4		
6.5	0	
6.6		
6.7		73 <b></b>
7.	PRINTING AND PLOTTING DRAWING	
7.1	Drawing Layout	
8.	USEFUL COMMANDS	
8.1	Function Keys and Accelerator Keys	
8.2		
8.3	Useful 3D Commands	